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A SURVEY OF PRIVATE FOREST LAND OWNERS IN BRITISH COLUMBIA

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1. HIGHLIGHTS OF THE STUDY RESULTS

* Based on survey responses by owners of at least 20 hectares of land, the number of small private forest land owners with between 20 hectares and 2000 hectares of forest land is estimated to be 21,000.

* Fifty-six percent of all land owners cite farm or ranch operation as their primary reason for owning land. These farm/ranch operators own more than 70% of the privately held forest land. The second most important reason for owning land is for use as part of the principal residence (20% of all land owners or 10% of private forest lands).

* Using an estimation procedure based on a sample of specific farm and residential properties, the amount of nonindustrial forest land in B.C. held by land owners on land parcels of between 20 hectares and 2000 hectares is 1.0 million hectares.

* Using an alternative estimation procedure based on property owner estimates of total forest land holdings of any size or any property classification, the population of land owners in the study owns 4.1 million hectares of forest land.

A SURVEY OF PRIVATE FOREST LAND OWNERS IN BRITISH COLUMBIA : AUGUST 1988

* In general forest land owners are well educated, older and male. Ninety percent of all forest land owners are male with an average age of 55 years. Forty percent of forest land owners have an annual income in excess of $50,000 while only 30% indicated an annual income of less than $25,000. Two-thirds of forest land owners have completed high school or have higher education. Twenty-five percent of forest land owners have completed a university/college degree, or have a technical/ vocational diploma or certificate.

* Forty-two percent of all forest land owners own property in the Prince George forest region, and 48% of all private forest land is also in the Prince George forest region. In contrast, 7% of forest land owners are in the Vancouver forest region and own only 4% of the total private forest land in British Columbia.

* Forest management objectives are concentrated on timber harvesting activities. About 75% of forest land owners have undertaken some form of harvesting activity during the last 10 years. Only 8% of forest land owners have undertaken tree planting or site preparation activities during that same time. When asked about their forest management plans for the <u>next</u> 10 years, harvesting activities remained the most important to forest land owners, although tree planting and/or site preparation activities had increased in importance.

2. INTRODUCTION AND STUDY OBJECTIVES

The objective of this study was to develop a profile of private forest land owners and identify their forest management objectives. Timber supply estimates or site characteristics of the private forest lands were not collected. Information on the socio-economic characteristics of the private forest land owners was collected and includes: age, sex, occupation, annual income, education and forestry training as well as past and future forestry activities. This study has been funded under the 1985-1990 Canada-British Columbia Forest Resource Development Agreement.

During the course of the study, keen interest was expressed by many foresters and other forest industry persons (both government and private) concerning estimates of the total number of hectares of privately held forest land. Although the prime focus of this study was on the forest land owners themselves, rather than the land they own, the data collected in the study did allow for estimates of the total amount of privately held forest land.

Greater success and effectiveness in government policies and programs directed at private forest land owners can be achieved if there is a better understanding of the forest land owners and their forest management objectives. In general, privately held land is, or has the potential to become, highly productive forest land. It is the decision of the land owner whether or not the land will be used for timber production, farm or ranch purposes (crops, pastures, etc.), recreational uses, held for investment, creation of environmental green

space or possibly a multi-use combination of these purposes. Without knowing the objectives and capabilities of the land owners, it is difficult to predict the benefits (financial, recreational, psychological, etc.) already accruing to the owners, and whether or not greater or additional benefits could be generated through better management and utilization of existing forest and other lands.

Approximately 5% of the total forest land in British Columbia is privately owned, and is comprised of several million acres of land which are reputed to be highly productive. Privately owned forest land in British Columbia encompasses a total land area estimated by G.M. Bonner in Canada's Forest Inventory, 1981 [9: Table P3, Page 69] to be 1.7 million hectares. A British Columbia Forest Service report in 1973 [10: Diagram 2, Page 6] estimated privately owned forest land to be approximately 2.6 million hectares. Using an estimation procedure based on a sample of specific farm and residential properties, this study independently estimates privately held non-industrial forest land in British Columbia to be 1.0 million hectares. Using an alternative estimation procedure based on property owner estimates of total forest land holdings of any size or any property classification, the population of land owners in the study owns 4.1 million hectares of forest land.

For comparison, a survey in Ontario estimated privately held forest land to be 1.3 million hectares, using the province's Ministry of Revenue regional property tax assessment rolls [30: Appendix B]. In the same report, another estimate of private forest land in Ontario [30: page 4, Table 1] suggested 4.2 million hectares or about 6% of the provinces's total forest land was privately

held. A New Brunswick survey of private woodland owners estimated the total privately owned forest land area to be 1.6 million hectares [1: pg 37] which represents approximately 30% of the total forest land in that province. Elsewhere in the same report, estimates from two other studies were cited [1: page 13] which had estimated total private forest land in New Brunswick to be 1.5 million hectares and 2.1 million hectares respectively.

The definition of forest land used in this study is as follows; "Forest land includes land that has deciduous or coniferous trees growing on it, cutover land, replanted forest land, or scrub/wild land that has the potential to become productive forest land." This definition of forest land closely approximates that used by the Canadian Forestry Service in application of its Private Forest Lands Program.[1] This assistance program requires that an applicant commit a minimum of 20 hectares (50 acres) of contiguous forest land for a period of fifteen years.

The study results also include reference to the differences and similarities of forest land owners by geographic area and by size of forest land owned. The six forest regions used by the provincial Ministry of Forests are used in this study as the basis of the geographic reporting.

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[1] The definition of forest land used in provincial government programs employs the concept of highest value and best use of the land being for forestry purposes. Tracts of land classified as farm or residential land under provincial government definitions, and thus not eligible for forest land programs, could be eligible for assistance under the Private Forest Lands Program.

3. METHODOLOGY

3.1 OVERVIEW

The design of the study comprised a mail-out questionnaire administered to a random sample of land owners selected from B.C. Assessment Authority records (Phase I), followed by a second detailed forestry questionnaire (Phase II) to forest land owners identified from the first questionnaire. A major objective of the study was to examine regional differences of forest land owners and their management practices. For ease of comparison with existing forestry data, the sample design incorporated the geographical forest regions as used by the provincial government Ministry of Forests. These six forest regions are: Vancouver, Kamloops, Nelson, Cariboo, Prince George and Prince Rupert. A map of these forest regions can be found on the front cover of the Phase II questionnaire in Appendix 3.

To be consistent with the requirements of the Canadian Forest Service Private Forest Lands Program, the definition of a small private forest land owner included all land owners with a minimum of 20 hectares of forest land to a maximum of 2000 hectares of forest land. The adjectives small and private were used to describe the target population of forest land owners: industrial or large scale forest land owners, large corporations, federal and provincial Crown holdings and other like agencies were specifically excluded. At the time of this study there was no readily available list of private forest land owners or private forest lands. Two of the main results of this study are the estimates of

the number of small private forest land owners, as well as the total amount of forest land held by small private forest land owners. Much of the time and effort in the first phase of the study was concerned with developing the list of small private land owners from which a sample was selected.

PHASE I OVERVIEW AND FIELDING PROCEDURES

The study was divided into two phases. In Phase I, a mailing list of small private land owners in B.C. who might own between 20 and 2000 hectares of forest land was developed. This mailing list was drawn from B.C. Assessment Authority (B.C.A.A.) property records and included all land parcels of no less than 20 hectares classified as residential or farm land in a rural area of British Columbia. It was found that the land parcels identified ranged in size from 20 hectares to just over 1,000 hectares. Very few land parcels were of this large 1,000+ hectare size. Most of the large size land parcels found on the B.C.A.A. list were owned by large industrial companies, or were Crown Lands despite the indicated residential or farm land use classification. This study specifically excluded such owners. Due to budgetary limitations, the search for potentially eligible land owners was restricted to rural areas of B.C. (outside city, town or municipality boundaries). As described in the next section, the search was further restricted to farm and residential land classifications. Approximately 33,500 such land parcels were listed, representing an estimated 29,000 land owners. As indicated by the results from the Phase I Questionnaire, approximately 73% of these land owners own between 20 and 2000 hectares of forest land, and are potentially eligible for the Canadian Forest Service Private Forest Lands Program.

In October 1987 the Phase I questionnaire was mailed to a random sample of 3000 land owners from the list of private forest land. A reminder post card was mailed three weeks later to all non-responding land owners. Finally, six weeks after the first mailing, a second copy of the questionnaire was mailed to all non-responding land owners. The overall response rate was 62%, however, because 3% were not usable the overall effective response rate for the Phase I questionnaire was 59% or 1779 completed, usable questionnaires.

PHASE II OVERVIEW AND FIELDING PROCEDURES

Phase II of the study was a follow-up to the Phase I questionnaire. From the Phase I questionnaire, a random sample of 480 respondents who owned between 20 and 2000 hectares of forest land was mailed an eight page detailed forestry (Phase II) questionnaire. Again, the random sample was stratified by the six forest regions. The Phase II questionnaire was mailed in January 1988, and a reminder post card was mailed 3 weeks later. A second copy of the questionnaire was mailed to all non-responding forest land owners six weeks after the first mailing. The Phase II questionnaire included questions concerning socio-economic characteristics and forest land management objectives. The overall total response rate was 68%, however, because 4% of the returns were not usable the overall effective response rate for the Phase II questionnaire was 64% or 308 completed, usable questionnaires.

DERIVATION OF 95% CONFIDENCE LIMITS

The more important results listed in this report include 95% confidence

limits or intervals which can be used as a measure of the statistical reliability of the estimated parameters. As an example, consider the estimate of the number of forest land owners of 21,251 ± 957. This implies that one can be 95% confident that the true number of forest land owners lies between 20,294 and 22,208 owners or in short form, 21,251 ± 957 owners. The actual calculation of the 95% confidence limits involves multiplying an estimate of the standard deviation of the parameter times the number two. The Central Limit Theorem and the Empirical Rule from statistical theory form the basis of this procedure. The theorem states that in repeated sampling, sums and means of samples of independent random observations drawn from a population tend to possess approximately a normal distribution. The Empirical Rule states that for normal distributions, 95% of the parameter estimates generated in repeated sampling will lie within two standard deviations of the true population mean. The Empirical Rule further states that 68% of the parameter estimates will lie within one standard deviation of the mean, and 99.7% of the parameter estimates will lie within three standard deviations of the mean. The study has chosen 95% confidence limits as being a reasonable measure of statistical confidence while at the same time providing a confidence interval that is not so overly large that the estimate becomes meaningless. Another way of wording 95% confidence is to say that 19 times out of 20 one can be sure that the interval we construct should include the true population mean.

It should be noted that many of the other woodlot owner studies examined had an implied statistical reliability of 68% confidence (see bibliography 2, 3, 4, 5, 6, 7, 8, 17, 21, 22). The results were generally reported with an estimate of

the mean and sampling error (standard deviation or standard error). The reliability was reported as [8; page 14]: "If an item has a sampling error [standard deviation] of 10 percent, chances are 2 out of 3 that an interval constructed to represent a range of 90 to 110 percent of the survey value would contain the true proportion value." This is the same as being 68% confident that the true mean will lie within the interval : estimated mean $\pm$ one standard deviation.

The 95% confidence or reliability reported for the key variables of this study are unusually good for a study of this type. Generally, larger error bounds are in evidence, as well as lower levels of confidence in the data, if they are reported at all.

CALCULATION OF PHASE I SAMPLE SIZE

These same basic statistical inference principles were also used in the determination of sample size. Regardless of sample size, one can be 95% confident that any sampling error in the estimated means (or totals) would be less than 2 standard deviations from the population mean (or total), assuming proper random sampling procedures were followed. To ensure that the estimated parameters would be useful for government planning purposes, the 95% confidence limits calculated should not be overly large or wide. Therefore, some constraint should be placed on the estimated standard deviation if possible. In deriving the sample size and confidence limits, the following is the calculation of the standard deviation of the estimated mean of a set of measurements:

$$\text{Standard Deviation of } \bar{y} = \sqrt{\text{Variance } (\bar{y})} = \sqrt{\frac{\sigma^2}{n}\frac{(N - n)}{(N - 1)}}$$

where: $\bar{y}$ - estimated mean of the population

N - total number in the population

n - size of random sample

σ^2 - population variance.

A bound was placed on the error, MAXERR, of the estimated mean so that one could be 95% confident that any sampling error in the estimated mean would be less than this maximum error. In other words, the error in the estimated mean would be less than two standard deviations from the true population mean as follows:

$$\text{MAXERR} \leq 2 \text{ (Standard Deviation of } \bar{y}) \ .$$

Using the above formula and solving for n, we now have a simple method to calculate the required sample size.

$$n = \frac{N\sigma^2}{(N - 1)(\text{MAXERR}^2/4) + \sigma^2} \ .$$

In general the population variance is not known and an estimate of the variance, or the sample variance if known from prior sampling, is substituted.

$$\sigma^2 \approx s^2 = \sum_{i=1}^{i=n} \frac{(y_i - \bar{y})^2}{n - 1} \ .$$

The calculated required sample size for the Phase I questionnaire was approximately 1,520 based on a maximum 5% error bound for the 95% confidence limits associated with the estimated proportion of B.C. land owners who are forest land owners. The sample size was divided among the 12 strata (residential and farm classifications by 6 forest regions) on a proportional basis so that the maximum error bound associated with each of the six forest regions would be approximately 10% for this key variable - the estimated proportion of land owners who are forest land owners. Because a response rate of slightly more than 50% was assumed, 3,000 questionnaires were mailed.

The final usable sample size for the Phase I questionnaire was 1,779. The actual calculation of sample size was based on the number of questionnaires required to calculate the number of forest land owners to within 5% of the true total for B.C., and to within 10% for each forest region. Since the response rate was much higher than expected and the variance of the parameter was lower than originally estimated, the final 95% confidence limits for this key variable was less than the 5% and 10% error bounds initially projected.

The key parameter estimated from the Phase I questionnaire was the number of forest land owners. The estimate of 21,251 $\pm$ 957 represents a 4.5% error bound on this estimated parameter. A second estimated parameter was the total amount of forest land on residential or farm rural properties comprised of parcels no less than 20 hectares. This parameter was estimated to be 1,019,400 $\pm$ 100,000 hectares which represents a 10% error bound. Comparison of the percentage error bounds of

these two estimated parameters indicates that the variance and standard deviation of the second parameter (10% error bound on forest land) is greater than the variance and standard deviation associated with the first parameter (5% error on number of owners).

To have calculated the estimate of total forest land owned in B.C. to within 5% of the population total, with 95% confidence, a much larger sample size with the same stratified sampling design would have required. Alternatively, the same sample size could have sufficed, but a stratified sample design that grouped the forest land into stratum based on their land size would have been required.

CALCULATION OF PHASE II SAMPLE SIZE

Using the same methodology for the Phase II questionnaire, a sample size of approximately 200 was calculated based on a maximum error bound of 15% for binomial or proportional variables (assuming a mean of 0.5). Again, assuming a 50% response rate, a mailing of 400 questionnaires was required. For purposes of the analysis it was noted that a representation from each of the forest regions and property classes was important for the final result tables. Therefore, it was decided that the mailing should be increased to 480, allowing for 40 questionnaires in each of the 12 strata of the study.

WEIGHTING OF RESULTS

All results presented in this report and attached appendices have been

weighted[2]. Weighting was applied to the survey responses so that an unbiased measure of a regional or provincial average was achieved. Because of the structures of the stratified random sample used in the Phase I and Phase II questionnaires, weights were applied to the answers of each of the individual respondents within each stratum. For example, a survey respondent who owned a selected farm land parcel in the Prince George region received a weight of 10,211/124 = 82.3. This respondent was one of 124 respondents to the Phase I questionnaire in the Prince George region where a total of 10,211 farm land owners were identified. The weight of 82.3 means that the respondent's answers were used to represent the answers of 82.3 other farm land owners in that same region. The weight of a residential land owner in the Vancouver forest region was 1365/153 = 8.9, so that the answers of any one Vancouver land owner were used to represent the answers of 8.9 other Vancouver residential land owners.

In calculating certain means and totals of Phase I results (notably those concerning question 5), the weighting proportions were based on the number of selected rural farm and residential properties rather than the number of land owners in each stratum.

A similar method was used to calculate the weights for the respondents to the Phase II questionnaire. The calculated weights used in the Phase II questionnaire were larger since the number of respondents was considerably lower: 308 in total as compared to the 1779 for Phase I. For example the weight of a

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[2] The one exception to this data weighting concerns the general discussions of "OTHER" answers and additional information and letters provided by individual respondents. The data used in these general discussions was not weighted.

residential forest land owner in the Vancouver forest region was 1071/26 = 41.2, as there were 26 respondents to the Phase II questionnaire in this stratum and an estimated 1,071 forest land owners in this stratum.

In addition to the proportional weighting scheme previously described, many of the survey results have also been presented with data weighted by the total amount of forest land owned. This additional weighting scheme was not used in the calculation of any of the key results such as means or totals, but rather was included solely to provide more information about the distribution of forest land. Technically, the weights in the forest land weighting scheme were the weights from the previous proportional weighting scheme multiplied by the total amount of forest land owned by each respondent. Using this type of weighting scheme, the results are often interpreted as indicating the amount or percentage of forest land owned by persons with a certain characteristic. For example, as indicated in Table 47 in Appendix, 65% of all privately held forest land in B.C. is controlled by forest land owners age 50 or older.

3.2 PHASE I DESIGN : B.C. LAND OWNERS SURVEY

Shown in Table 3.1 are details of the sampling design used for the Phase I questionnaire, including sample size selected and usable returns for each of the 12 sampling stratum (6 forest regions by 2 classes of property - residential and farm). The residential and farm classifications are those used by the B.C. Assessment Authority. The effective response rate of 59% is based on 1779 usable questionnaire returns from a total of the 3000 property owners sampled. Shown in the final column of the table are the response rates which vary between stratum.

TABLE 3.1 : PHASE I QUESTIONNAIRE RESPONSE

Forest Region	# of Land Parcels ≥ 20 Ha.	Sample Size Selected	Not Complete- Rejected	Usable Returns	Effective Response Rate %
		(RESIDENTIAL PROPERTY)			
Vancouver	1,483	295	13	153	52
Kamloops	1,216	288	3	173	60
Nelson	1,452	303	8	180	59
Cariboo	1,068	276	4	175	63
Prince George	2,570	310	7	182	59
Prince Rupert	1,080	283	7	180	64
		(FARM PROPERTY)			
Vancouver	839	190	1	129	68
Kamloops	5,298	216	6	113	52
Nelson	1,428	202	4	127	63
Cariboo	4,565	215	5	126	59
Prince George	10,973	219	5	124	57
Prince Rupert	1,576	203	5	117	58
TOTAL	33,548	3,000	68	1,779	59

The 59% response rate is exceptionally high for a mail-out questionnaire. Nevertheless, there remains a non-responding group of approximately 40%. A limited investigation of potential non-response bias was conducted using the known acreage of property owned by the 3000 selected land owners. Statistically, there was no difference between the size of property in the responding group as compared to the non-responding group. Therefore, it has been assumed that there was no statistical difference between the population of respondents and non-respondents in the Phase I study.

Included in Table 3.1 is a column indicating that 68 questionnaires were rejected from the analysis. The vast majority of these questionnaires were from land owners who were unable to answer the questions due to reasons such as poor health, age, or having been recently widowed. Such land owners wrote personal letters, included a notation on the questionnaire, or telephoned explaining the reasons why they were unable to complete the survey. Less than a dozen questionnaires or phone calls were received from land owners who refused to participate in the study for strong personal or political beliefs. During the preliminary stages of the study there was concern that the majority of B.C. land owners would not participate in such a land use study. The results from this study, however, show that if approached in an acceptable manner, British Columbia land owners are willing to answer questions about their land and about themselves.

RESIDENCY

Of course, owners of B.C. land are not necessarily B.C. residents. Approximately 8% of the 3000 land owners sampled had mailing addresses outside of British Columbia: 3% were Canadian addresses and 5% were foreign addresses. There were also properties with the address listed care of a legal or accounting firm. Thus the address was not sufficient information by which to identify the residency of the property owner. Further information concerning residency was collected in the Phase II questionnaire. The results confirmed that approximately 4% of B.C. forest land owners were foreign residents, and that 1% were living in Canada but outside British Columbia.

NUMBER OF PROPERTY OWNERS VERSUS NUMBER OF LAND PARCELS

The 12 stratum listed in Table 3.1 represent mutually exclusive groupings. That is, the 33,548 rural residential and farm properties (minimum 20 hectares in size) identified from the 1987 B.C.A.A. Assessment Roll represent unique land parcels. Because of the complications of joint ownership of property, and/or a land owner owning several properties within one forest region or in several forest regions, Table 3.1 does not represent a mutually exclusive grouping of B.C. land owners. For example, some properties listed 6 or more individual legal owners, with each owner having a different address. There are other examples where several land parcels were owned by different combinations of family members (probably an extended family farm: eg. husband/wife, mother/son, 2 brothers, Family Farms & Cattle Ranch Ltd., etc.) with all individuals having the same address. However, rather than joint ownership of property, many individual owners

(John Doe or John Doe Farms Ltd or Doe Investment Company) were listed as the legal owner of several land parcels in the same area. For these reasons, the sampling design was concentrated on the 33,548 identified land parcels rather than the more nebulous listing of B.C. land owners.

DISCUSSION OF THE RESIDENTIAL AND FARM CLASSIFICATIONS

An explanatory note is needed to describe the process by which the B.C.A.A. residential and farm property classifications from the 1987 Assessment Roll were selected to form the base population of properties for this study. In the first stages of this study a list was developed of properties which were at least 20 hectares in size, privately owned (nonindustrial and not Crown land), and had some potential as forest land. To identify land with forestry potential, advice was sought from foresters, woodlot owner associations and various government personnel. In particular, it was suggested in discussions with woodlot owners and B.C.A.A. officials that virtually all small private forest woodlots had been classified as either farm, if the owner already had obtained a farm classification, or as residential. Therefore, because all residential and farm land parcels were considered to have significant potential as forest land, they were included in the study population.

It was noted in interviews with members of Woodlot Owner Associations, federal and provincial government forestry program administrators, and forestry consultants that farmers and ranchers often operated forest woodlots in conjunction with their farm/ranch operations. It was thought that for many farmers and ranchers the woodlot or forested areas provided firewood, fenceposts

and poles for use in the farm/ranch operation. Many forest land owners applying for the Canadian Forestry Service Private Forest Lands Program are known to be farm/ranch operators, which is not surprising as farmers/ranchers have considerable investments in tractors, trucks and other equipment that could be modified for use in operating a woodlot. Also, within a given parcel of farm land there is often a portion that is not suitable for crops or pasture, has not yet been cleared of its forest growth, or is left in a forested state to provide shelter for cattle, or for aesthetic, environmental or recreational purposes. Farm land was therefore considered to have excellent potential in the locating of owners of forest land.

The tax implications of farmers/ ranchers operating a profitable woodlot on their farm property are not clear. Loss of the farm classification for farmers/ranchers could involve a financial penalty. Although growing trees for harvest is much the same as growing farm crops for harvest, the two have been viewed differently by previous government tax regulations. Because of this bias in taxation, it was suspected that there might be a tendancy for farm land owners to understate or deny the existence of forested areas. However, as indicated by the study results many farm/ranch owners did identify substantial forest land areas within their farm properties.

ADDING THE MANAGED AND UNMANAGED FOREST LAND TO THE RESIDENTIAL PROPERTIES

The decision to use the residential and farm property classifications to locate forest land owners was strengthened in light of the two new land classifications being implemented by the B.C.A.A. for the 1988 Assessment Roll:

the Unmanaged Forest Land Classification and the Managed Forest Land Classification. A review of the almost complete Unmanaged Forest Land Classification showed that more than 90% of the properties ($\geq$ 20 hectares) had been classified as residential in the 1987 Assessment Roll. The list of properties used in our study was taken from the 1987 Assessment Roll, and so already included 90% of the Unmanaged Forest Land properties. The remaining 10% (about 50 properties) of the Unmanaged Forest Land properties were appended to the residential property list. This inclusion of non-residential properties is not expected to cause any significant bias in the study results.

The list of Managed Forest Lands was also examined. Identified in the list were approximately 90 land owners, many of whom operated under the former Taxation Tree Farm regulations and who accounted for vast tracts of forest land. After excluding the large industrial owners from this list, fewer than 10 property owners remained. Again it was noted that most of these small Managed Forest Land owners were already listed in the 1987 Assessment Roll as residential land owners. Those who were not listed and owned land parcels $\geq$ 20 hectares were added to the residential list used in the study. No bias in study results is expected from the inclusion of such properties.

LAND PARCELS EXCLUDED FROM THE STUDY

The remaining land classifications used by the B.C.A.A. in the 1987 Assessment Roll included Utilities, Industrial, Business/Other, Recreational/ Non-Profit, Forestry, and Tree Farm. The two categories referred to as Forestry and Tree Farm were renamed (on the 1988 Assessment Roll) Unmanaged Forest Land

and Managed Forest Land, respectively, and have been previously discussed. There is some potential for forest land to be found in these other categories, especially the recreational/non-profit classification. As previously stated budgetary limitations restricted the study population to the residential and farm classifications in rural areas.

For future studies, it was generally agreed that the best way to locate additional forest land owners would be to use the residential and farm classifications, as well as include non-rural properties: that is, those residential and farm properties located within city, town, village or municipal boundaries. A second method to locate additional forest land owners would be to expand the definition of forest land to include land parcels under 20 hectares in size. It was noted in discussions with woodlot owner associations that many members owned and operated woodlots of less than 20 hectares in size and were therefore concerned about the limit of 20 hectares. Another reason for considering properties under 20 hectares in size concerned the definition of contiguous forest land property. It some instances it was noted that a property owner might own several contiguous land parcels, each individually less than 20 hectares in size but considerably more than 20 hectares in total. It is not known what proportion of land parcels might fall into this category. It was noted that land parcel sizes in the Lower Mainland area, in particular, and land parcel sizes inside city/town boundaries, in general, are on average smaller than land parcels in the rural areas.

During the development of the mailing list for the Phase I questionnaire, it

was noted that approximately 20% of the residential properties and 1% of the farm properties of 20 hectares or more were excluded from the study because the listed owner was a Crown agency, large forest, mining or railway company, or other ineligible owner. These land parcels have not been included in the total number of residential and farm land parcels listed in Table 3.1.

3.3 PHASE II DESIGN : B.C. FOREST LAND OWNERS SURVEY

Shown in the following table is the sample size selected for each of the 12 sampling stratum, 6 forest regions by 2 classes of property. The overall effective response rate of 64% was based on 308 usable questionnaire returns from a total of 480 forest land owners sampled. As indicated in the final column, the response rate varied somewhat by stratum.

TABLE 3.2 : PHASE II QUESTIONNAIRE RESPONSE

Forest Region	Estimated # Forest Land Owners	Sample Size Selected	Not Complete-Rejected	Good Usable Returns	Effective Response Rate %
		(RESIDENTIAL PROPERTY)			
Vancouver	1,071	40	3	26	65
Kamloops	916	40	1	31	78
Nelson	1,102	40	1	29	72
Cariboo	744	40	2	21	52
Prince George	1,908	40	3	21	52
Prince Rupert	728	40	2	29	72
		(FARM PROPERTY)			
Vancouver	386	40	3	27	68
Kamloops	2,704	40	1	20	50
Nelson	973	40	1	29	72
Cariboo	2,826	40	2	23	58
Prince George	7,000	40	1	28	70
Prince Rupert	893	40	0	24	60
TOTAL	21,251	480	20	308	64

The sample size of 480 was selected based on the expectation of a 50% response rate. Prior to mailing out the questionnaire, it was assumed that a 50% response rate from each of the 12 stratum, or a total of 240 returned questionnaires, would be obtained. As can be seen in the table, at least 20 questionnaires were returned from each of the 12 stratum. The actual statistical reliability of the data was therefore higher than expected.

To provide some guidelines on the reliability of the results for the Phase II questionnaire, Table 3.3 was prepared based on a binomial (Yes/No) distribution. The confidence limits were calculated for several confidence levels using a normal approximation. The correction for continuity (1/2n) was not deemed necessary since, firstly, the sample size was large (n=308) and secondly, the skewness of the normal approximation was not noticeable close to the midpoint value of 50%. The calculations assume a sample response of 50% answering Yes, and 50% answering No in each of the 12 stratum. If the sample response was other than a 50% split, the appropriate confidence limits would be <u>less</u> (or a narrower confidence interval) than that shown in Table 3.3. That is, the 50% split assumption represents the worst case (for a binomial distribution) and the largest possible confidence interval.

TABLE 3.3 : CONFIDENCE LIMITS FOR PHASE II RESULTS

(For Proportional or YES/NO Questions)

	Confidence Limits
99% Confidence Level	± 11 percentage points
95% Confidence Level	± 8 percentage points
90% Confidence Level	± 7 percentage points
80% Confidence Level	± 5 percentage points
68% Confidence Level	± 4 percentage points

As an example of how to use this confidence limit information, consider the question; "During the last 10 years, have you sold any wood products? (Yes / No)". The results from the survey show that 50% of the forest land owners said Yes, and 50% answered No. The 95% confidence interval for this result would be 42% to 58% (50% ± 8%). The confidence interval is interpreted as follows: the proportion of forest land owners who sold wood products in the last 10 years can be expected to be between 42% and 58% 19 out of 20 times (or with 95% confidence) that this survey would be conducted.

There was no readily available information that could be used to check for the presence of non-response bias in Phase II results. The Phase II questionnaire was mailed to a random sample of forest land owners identified from the Phase I questionnaire. If there was no significant bias in the Phase I respondents, the follow-up random sampling procedure for Phase II would be acceptable. Any response bias present in the Phase I respondents would have been further intensified by using the Phase I responding group as the basis of the random sample for the follow-up questionnaire. Again, it has been assumed that the

results from the Phase II questionnaire are not affected by non-response bias.

It was interesting to note that the response rate to the Phase II questionnaire was slightly higher than that for the Phase I questionnaire (64% versus 59%). Even though the Phase II questionnaire was lengthy and involved several personal questions, the respondents seldom omitted questions and often provided additional notations in the margins. All forest land owners selected for the Phase II questionnaire had previously completed the short Phase I questionnaire and so were familiar with the study.

Approximately 20 questionnaires were rejected from the Phase II analysis, as shown in Table 3.2, because of incomplete or inconsistent responses. The reasons for rejection were varied and included: a re-estimation of the forest land holdings outside the 20 to 2,000 hectare eligibility range, age or health problems, unfamiliarity with forestry terms and practices, or limited knowledge of what activities had taken place on the forest land. Any questionnaire with less than three quarters of the answers completed was automatically rejected.

4. PHASE I : B.C. LAND OWNERS SURVEY RESULTS

4.1 OVERVIEW AND DEFINITIONS

To be eligible for this study the land owner had to own a minimum 20 hectare land parcel of residential or farm land in a rural area of British Columbia. In general, the study included all small private land owners, small companies, corporations, associations, cooperatives, etc. who owned at least 20 hectares. It was not necessary that the land owner reside on the owned property and it was acceptable to be a resident of another province or country. In the case of company owned land, all medium and large industrial companies were excluded from the study as were all Crown corporations, Crown land listings, large forestry companies, railways, large mining companies, and other identified industrial firms. As previously noted, a land owner might own several contiguous land parcels, each individually less than 20 hectares in size but considerably more than 20 hectares in total. Such land owners would be excluded from this study, unless they also owned at least one residential or farm land parcel that was of minimum 20 hectares in size. Also excluded in this definition were all residential and farm parcels within city, town, village or municipal boundaries (non-rural areas), regardless of property size.

A forest land owner is firstly a land owner (according to the above definition) who must also own property which includes at least 20 hectares of forest land. Without this minimum 20 hectares of forest land, virtually all B.C. land owners would qualify as forest land owners. That is, on most residential or

farm parcels of at least 20 hectares there is some portion of the land growing trees for wind breaks, protection or shade for cattle, or for aesthetic reasons around a principal residence or along a creek or stream. Land owners were asked to provide their own estimate of the amount of forest land on their owned property including all land that had trees growing on it, cutover land, and replanted forest land. Owners were requested to exclude land that was too rocky, too wet, or too steep for growing trees. This is a very broad definition of forest land since current forest type (coniferous or deciduous), site quality (poor, good), accessibility, and other factors were not considered. Even with this stated definition, a few respondents submitted answers such as: "No forest land.... all scrub alder and pine" or "I only included the coniferous growth. I assume you are not counting deciduous forests." The amount of bias introduced into the measured variables is not known. It is assumed that most respondents used the given broader definition of forest land.

4.2 NUMBER OF FOREST LAND OWNERS

A significant result from the B.C. Land Owners Questionnaire is the number of forest land owners which is estimated to be 21,000. More than 40% of forest land owners own property in the Prince George forest region which is also the largest of the six forest regions. A further 34% of forest land owners own property in the Kamloops and Cariboo regions. Outlined in Table 4.1 are the results of this estimate.

TABLE 4.1 : NUMBER OF FOREST LAND OWNERS IN B.C.

(INCLUDING 95% CONFIDENCE LIMITS)

Forest Region	# of Land[1] Owners with ≥ 20 Hectares	Proportion[2] Forest Land Owners	# of Forest[3] Land Owners	% Total by Region
Vancouver	2,132	0.68 ± 0.05	1,457 ± 103	7
Kamloops	5,177	0.70 ± 0.07	3,620 ± 349	17
Nelson	2,623	0.79 ± 0.04	2,075 ± 113	10
Cariboo	4,392	0.81 ± 0.05	3,570 ± 224	17
Prince George	12,657	0.70 ± 0.07	8,908 ± 842	42
Prince Rupert	2,186	0.74 ± 0.05	1,621 ± 108	8
Total : B.C.	29,167	0.73 ± 0.03	21,251 ± 957	100

Note 1: This estimate was derived from the B.C.A.A. computer list of all properties ≥ 20 hectares.

Note 2: The estimate of the proportion of land owners who are also forest land owners was based on the respondent's answer to Question 2 concerning the total amount of forest land owned in B.C. If the respondent owned ≥ 20 hectares of forest land, he was considered to be a forest land owner. The survey responses have been weighted to reflect provincial and/or regional results.

Note 3: The estimated number of forest land owners is estimated as the number of land owners with ≥ 20 hectares multiplied by the proportion of forest land owners.

On average, 73% of land owners are also forest land owners (with the minimum 20 hectares of forest land). As indicated in Table 4.1, this proportion ranges from 68% in the Vancouver forest region to 81% in the Cariboo forest region. The number of forest land owners ranges from estimated 1,457 in the Vancouver forest region to an estimated 8,908 in the Prince George forest region.

Some caution should be exercised in the interpretation of the results by geographic region. The sampling procedure selected a specified number of properties from each forest region. It is explicitly assumed that any other property held by the land owner is also in the same forest region. The Phase I questionnaire asks the land owner to estimate the number of acres of forest land in the selected land parcel, as well as the total number of acres of forest land he or she owns in the province of British Columbia. Although this could have presented major interpretation problems, available information suggests that small private forest land owners have localized property holdings within a single forest region. Results from the Phase II questionnaire also support this assumption as only a very small percentage of forest land owners have forest land in more than one forest region.

4.3 AMOUNT OF PRIVATE FOREST LAND

Phase I questionnaire results provided sufficient information allowing for the calculation of two estimates of the total amount of privately held forest land. The first - sample property estimate - was based on the sample of specific farm and residential properties, as found in question 5 of the Phase I questionnaire. The second estimate was based on property owner estimates of total forest land holdings as indicated in question 2 of the questionnaire.

Indicated in Table 4.2 is the estimate of the total amount of forest land in the rural residential and farm properties based on responses to question 5. Incorporating the total number of rural residential and farm parcels (33,548 parcels) from the B.C.A.A. computer list, and the average amount of forest land in the land parcels (30 hectares) from the survey responses, the estimated total is 1,019,400 hectares of forest land.

TABLE 4.2 : MEAN AND TOTAL FOREST LAND BY REGION

(BASED ON A SAMPLE OF SPECIFIC FARM AND RESIDENTIAL PROPERTIES)

Forest Region	# Residential[1] and Farm Properties (≥ 20 Hectares)	Sample[2] Property Mean Hectares Forest Land	Total[3] Hectares Forest Land	% Total by Region
Vancouver	2,322	29	66,500 ± 7,400	7
Kamloops	6,514	28	181,000 ± 35,300	18
Nelson	2,880	35	99,400 ± 10,300	10
Cariboo	5,633	28	158,500 ± 23,800	16
Prince George	13,543	32	433,200 ± 89,300	42
Prince Rupert	2,656	30	80,800 ± 8,300	8
Total : B.C.	33,548	30	1,019,400 ± 100,000	100

Note 1: The number of rural residential and farm properties ≥ 20 hectares was derived from the B.C.A.A. computer list.

Note 2: The mean hectares of forest land in the selected sample of rural residential and farm properties was based on the survey responses to question 5. The survey responses have been weighted to reflect the provincial or regional mean.

Note 3: The total hectares of forest land was estimated as the number of rural residential and farm properties ≥ 20 hectares, multiplied by the mean hectares of forest land in the selected sample of properties.

Depicted in Table 4.3 is an alternate estimate of the total amount of privately held forest land in B.C. based on owner responses to question 2 which referred to the total amount of forest land held by the land owner of any size, location (rural, non-rural) or property classification. Multiplying the total number of land owners, 29,167, and the mean value of forest land holdings of 140 hectares derived from the survey responses to question 2, yields an estimated total of 4,085,900 hectares of forest land.

TABLE 4.3 : MEAN AND TOTAL FOREST LAND BY REGION

(BASED ON PROPERTY OWNER ESTIMATES OF TOTAL FOREST LAND HOLDINGS)

Forest Region	# of[1] Land Owners	Mean[2] Hectares Forest Land	Total[3] Hectares Forest Land	% Total by Region
Vancouver	2,132	68	145,600 ± 38,900	4
Kamloops	5,177	156	807,300 ± 273,000	20
Nelson	2,623	93	245,000 ± 59,400	6
Cariboo	4,392	168	737,300 ± 237,300	18
Prince George	12,657	155	1,966,300 ± 844,000	48
Prince Rupert	2,186	84	184,400 ± 42,900	5
Total : B.C.	29,167	140	4,085,900 ± 922,000	100

Note 1: This estimate was derived from the B.C.A.A. computer list of all properties $\geq$ 20 hectares.

Note 2: The mean hectares of forest land was based on property owner estimates of the total amount of forest land held by the owner of any size, location or classification in B.C. The owner may be the sole legal owner or may own only part of the forest land. The estimate was based on the survey responses to question 2. The survey responses have been weighted to reflect the provincial or regional mean.

Note 3: The total hectares of forest land was estimated as the number of land owners, multiplied by the mean hectares of forest land owned by property owners.

This estimation procedure, based on property owner estimates of total forest land holdings, produced an estimate of 4.1 million hectares of privately owned forest land which is more than four times larger than the estimate calculated using the sample of specific rural residential and farm properties. The two estimates are different because they are measuring different groupings of forest land.

The 1.0 million hectare estimate was based on rural farm and residential land parcels of a minimum 20 hectares. The only known factor that would tend to exaggerate the amount of forest land[3], using the sample of selected properties estimate, would be an upward bias in the amount of forest land as reported by the respondent. There is no evidence of such upward bias, but there is the

[3] The definition of forest land used in this study does not employ the concept of the highest and best use of the land being for forestry purposes. The study definition of forest land allows the land owner to decide what portion of their land is currently being used or will be used for forestry purposes. The study definition is based almost entirely on farm and residential land holdings which presumably have their highest and best use in farm or residential purposes and not the forestry purpose that the land owner may have chosen.

possibility that farm respondents might have under-reported the amount of forest land on their selected land parcel. There will be additional privately held residential and farm lands within municipal, town, city, or village boundaries greater than 20 hectares which were not included in this estimate. The inclusion of forest land on residential and farm parcels of fewer than 20 hectares, as well as residential and farm parcels in non-rural areas into the estimate of total forest land would significantly increase the total estimate of forest land. Privately held forest land need not be restricted to farm and residential properties although it appears that the majority of the privately held land is in these categories. For example, the property might be classified as Business/Other or Recreational/ Non-Profit. Thus, the estimate of 1.0 million hectares of forest land, based on a sample of specific farm and residential properties, represents the minimum amount of privately held forest land in British Columbia.

The 4.1 million hectare estimate is upwardly biased because the estimation procedure does not control the potential double counting of forest properties. Because in the land owner population there is a noticeable presence of joint ownership of properties, partnerships, and groups and/or associations with several unrelated individuals jointly owning the same land parcel there will be some overstatement of the total amount of forest land. Such double counting is not possible under the sample property methodology. The property owner estimate of total forest lands method relies on the accuracy of the land owner's answer as to how much forest land is owned in total[4]. There is the possibility that the

[4] The land owner might also have understated the amount of forest land. Comments on questionnaires indicated that some land owners felt that their scrub alder and pine forested areas, or other wild lands did not qualify as forested

land owner might have included in his estimate forest land areas which are controlled through long term agricultural /grazing leases or other long term rental or licence arrangements. This is especially true for some of the land owners with provincial woodlot licenses who might have added their woodlot to their total owned forest land. For these reasons it is believed that the estimate of 4.1 million hectares represents an upper bound on the estimate of total privately owned forest land in British Columbia.

Results shown in Table 4.1 and Table 4.3 provide considerable insight into the distribution of forest land owners and total forest land holdings. The results reveal that 42% of the forest land owners and 48% of the forest land holdings are in the Prince George region. The areas of Kamloops and Cariboo have fairly equal distributions as 38% of the total forest land and 34% of forest land owners are accounted for between these two regions. The remaining three regions account for 24% of the forest land owners and 14% of the forest land. The Vancouver region accounts for approximately 7% of the forest land owners and only 4% of the private forest land.

Presented in Tables 4.4 and 4.5 is a condensed summary of the results from the Phase I questionnaire. Detailed in Table 4.4 are the results based on the answers provided by all responding land owners, while the results shown in Table 4.5 are restricted to the subset of answers from respondents who own at least 20 hectares of forest land. Approximately 73% of the land owners in the study are also forest land owners.

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areas and so they answered that they had no forest land.

TABLE 4.4 : ESTIMATES OF MEANS BY REGION

(MEAN VALUES FOR B.C. LAND OWNERS)

	Q1[1] - All Land Owned: Mean Hectares	Q2[2] - All Forest Land Owned: Mean Hectares	Q3[3] - Mean # Forest Parcels	Q5[4] - Forest Land Mean Hectares
Vancouver	108	68	2.7	29
Kamloops	374	156	4.0	28
Nelson	176	93	2.6	35
Cariboo	454	168	5.6	28
Prince George	538	155	2.6	32
Prince Rupert	181	84	2.5	30
B.C.: Mean	406	140	3.3	30

Note 1: Question 1: "How many acres of land do you own in the province of B.C.?"

Note 2: Question 2: "How much of this land (in Question 1) is forest land?"

Note 3: Question 3: "How many individual parcels of land make up this forest land?"

Note 4: Question 5 refers to a pre-selected rural residential or farm land parcel owned by the respondent and asks; "How much of this property is forest land?"

TABLE 4.5 : ESTIMATES OF MEANS BY REGION

(MEAN VALUES FOR FOREST LAND OWNERS)[1]

	Q1 - All Land Owned: Mean Hectares	Q2 - All Forest Land Owned: Mean Hectares	Q3 - Mean # Forest Parcels	Q5 - Forest Land Mean Hectares
Vancouver	134	96	3.1	38
Kamloops	506	220	5.5	41
Nelson	195	116	3.1	42
Cariboo	533	205	6.7	34
Prince George	671	219	3.6	45
Prince Rupert	213	110	3.1	39
B.C.: Mean	501	190	4.3	41

Note 1: Forest land owners own at least 20 hectares of forest land in total throughout the province.

The most easily observable difference between Tables 4.4 and 4.5 is the higher mean values estimated for the forest land owners as compared to the general population of land owners. On average, land owners own 406 hectares of land of which 140 hectares is forest land, as compared to forest land owners who generally own 501 hectares of land of which 190 hectares is forest land.

Detailed tabulations of the seven questions from the Phase I questionnaire can be found in Appendix 2. Tables 4 to 20 were tabulated on the basis of the answers from all responding land owners, while Tables 21 to 37 were tabulated on the basis of the answers from forest land owners. The results for all land owners are very similar to those for all forest land owners. For this reason the remaining results from the Phase I questionnaire refer to all land owners and not

just the subset who are also forest land owners.

In general the land owners of the Vancouver, Nelson and Prince Rupert regions have smaller total land holdings. In Vancouver, 50% of land owners own less than 50 hectares of land as compared to the 18% of land owners for all of the province who own fewer than 50 hectares of land. As shown in Table 5 in Appendix 2, 70% of forest land is owned by land owners who have 400+ hectares of land. In Vancouver and Prince Rupert regions about 42% of forest land is owned by land owners with 400+ hectares; while, in the areas of Cariboo and Prince George, about 75% of forest land is controlled by large land owners.

The results from responses to question 5 show that 19% of rural residential and farm parcels have no forest land (see Table 14 in Appendix 2). This varies somewhat by region, with 28% of Prince George land owners indicating no forest land associated with the selected land parcel, and 7% of Vancouver land owners responding that they had no forest land on the selected parcel. On average, 43% of each land parcel was forest land (see Table 15 in Appendix 2). Also, 46% of the rural residential and farm parcels contained 50% or more forest land area. Approximately 10% of the land parcels were found to be 100% forest land area.

During the last 10 years, 58% of forest land owners, as compared to 51% of all land owners, have harvested some timber or other wood product from the selected land parcel (see Tables 16 and 33 in Appendix 5). In the Prince George region, the percentage (37%) of land owners who have harvested during the last 10 years was noticeably lower than for all other regions.

4.4 REASONS FOR OWNING LAND

The primary objective of this section is to present the major reasons cited for owning land in British Columbia. Land owners were asked to list up to three reasons for owning the selected land parcel.

TABLE 4.6 : REASONS FOR LAND OWNERSHIP

(RURAL LAND OWNERS : IN PERCENT)

Reasons	Main Reason	2ND Reason	3RD Reason
Land Investment	7	13	13
Farm/Ranch Operation	56	19	4
Timber to Sell	3	13	15
Timber for Own Use	0	17	30
Principal Residence	20	17	5
2ND Residence	5	5	5
Rental Income	2	5	7
Personal Recreation	2	7	15
Inheritance	4	2	1
Other Reason	2	2	4
Total	100	100	100

As shown in Table 4.6, more than half (56%) of B.C. land owners indicated that their primary reason for owning the selected parcel of land is because it is part of their farm or ranch operation. Farm or ranch operation is also the most often ranked as the second reason for owning the land parcel. Twenty percent of land owners listed principal residence as their main reason for owning the land parcel, and 17% listed this as their second reason.

Only a small percentage (3%) of land owners own the land primarily for its

timber resource. A negligible number of land owners use the land primarily for timber for their own use. Timber production (for sales or own use) was selected more often as a second or third reason, and timber for own use was cited more often than timber for sales. About 7% of land owners indicated that they own the land primarily for investment purposes. Investment was cited more frequently as a second or third reason. The remaining categories are of minor importance.

During data compilation, many answers that were found in the "Other" category were recoded into existing categories. For example, answers such as: "love of the land", "peace and quiet", and "no close neighbours" were assumed to be an extension of the answer "part of my principal residence" or "my second residence" if one of these answers had already been selected. If neither of the residence answers had been selected, this answer was not recoded but instead remained in the "Other" category. As another example, the answer category "Farm" was expanded to include answers such as: "ranching", "part of my hobby farm", and "a place for breeding and raising horses". Respondents who wrote in the answer "ranching" or "breeding horses" in the "Other" category had their answers recoded into the "Farm" category. Another common recoding occurred for the "Inherited" category. Many answers found written in the "Other" category reflected that previous family ownership plays an emotional role in owning land and is an important reason for maintaining ownership of a particular land parcel. The original purpose of the "Inherited" category was to provide a reason of ownership to land owners who recently inherited land and might not yet have plans for its use. By recoding these "Other" previous family ownership answers into the "Inherited" category, the meaning of the "Inherited" category was expanded to

include that land was previously owned by the family.

Approximately 6% of land owners provided "Other" reasons for owning land that could not be recoded into existing categories. The most frequent other answers included those pertaining to land obtained through debt settlement, mineral or water purposes, and land to be kept for family and future generations. Land intended to be willed to family accounted for 66% of the other answers. Some typical comments included:

- "would like to leave for children or grandchildren".
- "holding for next generation".
- "leave to grandsons".
- "to our children so that some day they will farm it".
- "to pass along to children".
- "keep it in the family".
- "to provide environment land for our 8 children and their children".
- "plan to give all of our land to our 3 children in the next 3 years".

Land obtained as a settlement accounted for 12% of the other answers. Some typical comments included:

- "up for sale to settle estate".
- "received the land in exchange for other property".
- "land settlement board".
- "foreclosed when mortgage went into default".

Land owned for mineral or water purposes represented 7% of the other answers. Some typical comments included:

- "watershed to supply water for agricultural operations and household use".
- "strictly for mineral and water development".
- "future limestone quarry operation".
- "mineral property with surface and mineral rights".

Land owned for miscellaneous reasons represented 15% of the other reasons which included:

- "explosives storage".
- "to gain access to other property".
- "airport".
- "to create a facility for restoring families".
- "used for overflow log storage".
- "development buffer to protect residents".
- "operating a private school".

The reasons for owning land can also be weighted by the amount of forest land owned by each land owner. Shown in Table 4.7 is this alternate method of displaying the reasons for owning land. This weighting by amount of forest land has not necessarily changed the ranking of the most important reasons, but it has intensified their importance.

TABLE 4.7 : REASONS FOR LAND OWNERSHIP

(WEIGHTED BY FOREST LAND HOLDINGS : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Reasons			
Land Investment	6	10	15
Farm/Ranch Operation	71	12	1
Timber to Sell	6	25	17
Timber for Own Use	0	28	24
Principal Residence	10	12	26
2ND Residence	2	2	2
Rental Income	2	5	3
Personal Recreation	0	4	8
Inheritance	1	1	1
Other Reason	2	1	3
Total	100	100	100

Of the forest lands in B.C., 71% is owned by owners who list farm/ranch operations as their primary reason for owning land; and, principal residence is

listed as the primary reason by owners who control 10% of the forest land. The timber production categories for sales and own use have risen from 3% to 6% under this weighting scheme. Twenty-five percent of the forest lands are owned by owners who list timber sales as their second most important reason for owning land, while another 28% of forest land is controlled by those who list timber production for own use as their second reason. These forest land weighted results show that owners of large areas of forest land are more likely to own their forest lands for its timber resource than are owners of smaller forest land areas. The categories that were relatively unimportant in Table 4.6 remain so in Table 4.7.

When the analysis of the reasons for owning land were restricted to the subset of land owners who own at least 20 hectares of forest land, there were no observable differences in reasons cited. Tabulated in Tables 17 to 20 in Appendix 2 are reasons cited by B.C. land owners for owning their land. Tabulated in Tables 34 to 37 in the same Appendix are the major reasons for owning land but only for owners of at least 20 hectares of <u>forest</u> land. The information and rankings of reasons given by land owners compared to forest land owners is virtually identical.

As highlighted by the rankings in Table 4.8 (see also Table 19 in Appendix 2) land use did not vary significantly across regions. Farming/ranching and principal residence were ranked first and second respectively in all regions. For some regions there are more reasons ranked than for others because reasons selected by less than 5% of the land owners in a region were not ranked.

TABLE 4.8 : PRIMARY REASON FOR OWNERSHIP OF PROPERTY BY FOREST REGION

(RURAL LAND OWNERS : RANKINGS)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Reasons							
Farm/Ranch	1	1	1	1	1	1	1
Principal Res.	2	2	2	2	2	2	2
Investment	3	3	3	-	-	4	3
Second Res.	5	-	4	3	-	3	4
Inheritance	6	-	5	-	-	-	-
Timber Sales	4	-	4	-	-	-	-
Other	5	-	-	-	-	-	-
Personal Rec.	-	-	-	-	-	-	-
Rental	-	-	-	-	-	-	-
Timber Own Use	-	-	-	-	-	-	-

Of the more than 1850 respondents who returned the Phase I questionnaire, approximately 25 provided additional information in the form of handwritten or typed comments either submitted as an aside of several sentences, or enclosed as a letter. Letters ranged from a concise paragraph to three or four pages, were always signed, and included return addresses.

Generally concerns expressed related to the environment or ecology, family and personal or recreational concerns, and to a lesser extent political or taxation concerns. There were also a few people who requested that they be "taken off the mailing list" either because the selected parcel had been sold, the landowner was deceased, or because they had no wish to participate in anything that was "to do with government".

Lengthy asides or letters generally referred to the respondent's "love of the land" and "hopes/efforts to maintain environmental enhancement". Also many respondents expressed an appreciation for privacy, peace and quiet. One aside is particularly revealing as it embodies each of the aforementioned:

> "To protect a moderate size parcel from subdivision as a community of plants and animals (flora and fauna), as a forest which is more than trees and timber. To come to know and appreciate the diverse plant communities and birds and other fauna dependent on and inter-related with them. From that understanding to rehabilitate the stands, assure that my intrusions maintain the natural diversity and a continuous forest. To maintain a balance by natural selection harvesting, the by-product of which will be timber ... and firewood for a beautiful, healthy forest for its sake."

5. PHASE II : B.C. FOREST LAND OWNERS SURVEY RESULTS

5.1 OVERVIEW

This chapter includes a discussion of the Phase II questions and highlights the more interesting results. The detailed results for the Phase II questionnaire have been tabulated for each of the six forest regions and can be found in Appendix 4. The percentages shown in the detailed tables or discussed in this chapter may not add to 100% due to the effects of rounding.

The Phase II results were based on 308 usable questionnaires, considerably less than the 1779 usable questionnaires available to the Phase I portion of the study. As a result, the reliability of the Phase II results are less than those of the Phase I results. There is far greater reliability in the overall B.C. averages than for those for each of the forest regions.

5.2 SOCIO-ECONOMIC CHARACTERISTICS

AGE DISTRIBUTION (TABLES 46 & 47)

The results from the questionnaire reveal that 68% of forest land owners are age 50 years or older and 13% of owners are age 70 or older. The remaining 32% of the owners are distributed 2% in the 20-29 age group, 11% in the 30-39 age group, and 20% in the 40-49 age group. The average age of forest land owners is 55.

The age distribution by forestry region is similar for all regions with

Prince Rupert and Cariboo having the lowest average age (53) and Kamloops and Vancouver having the highest average age (58).

Further analysis of the size of properties and age of owners show that 90% of the private forest land is controlled by owners age 40 or older. Clearly, the costs of purchasing and owning large parcels of forest land can be borne only by well established, older individuals who have capital reserves.

TIME PERIOD OF FOREST LAND ACQUISITION (TABLES 2 & 3)

Although the average age seems high, it is consistent with the results that show 48% of the land owners acquired their property prior to 1970 (at least 18 years ago) and 74% of forest land owners acquired their property prior to 1980. Approximately 25% of the B.C. forest land owners acquired their forest lands in each of the three decades, 1960s, 1970s and 1980s (up to 1987).

The land acquisition data was also weighted by the total amount of forest land owned by each land owner. Of private forest land in B.C., 33% is controlled by forest land owners who acquired the main portion of their forest lands during the 1980s. Similarly, 21% of forest land is owned by owners who acquired their lands during the 1970s, and 27% is owned by owners who acquired their lands during the 1960s.

LAND OWNED BY PREVIOUS GENERATION OF FAMILY (TABLES 4 & 5)

It was noted by some forest land owners that although the property was being managed or partly managed by a younger family member (eg. son or grandson), the

ownership of the property remained with the older family member. The results show that 21% of forest land owners own forest land that was owned by a previous generation of the family. Inheritance was one method that property ownership was transferred between generations. It is also possible that the land was sold or transferred to a younger family member/relative.

The 21% for previous relative ownership represents the overall B.C. average but misrepresents the individual regions. There is a clear difference between the Prince George region and the other five forest regions. Only 9% of the forest land owners in the Prince George region own forest land previously owned by a relative; while, in all other forest regions approximately 30% of forest land owners own land previously held by a relative. This difference is most likely explained by the more recent settlement and development of the Peace River area and other areas in the Prince George forest region as compared to the more established developments in other forest regions.

This same difference between regions is apparent when the previous relative ownership data is weighted by the amount of forest land owned by each land owner. With respect to the overall B.C. average, 16% of forest land is controlled by owners who own some land previously owned by a relative. Only 3% of forest lands in the Prince George region are controlled by owners who own land previously held by a relative. In the other five forest regions, 20% to 40% of forest lands are owned by forest land owners who own land previously held by a relative.

GENDER (TABLES 48 & 49)

Overall, about 90% of all forest land owners are male. There are slight differences by region as 20% of the forest land owners in Vancouver, Nelson and Cariboo regions are female. As indicated by the results for the Kamloops region, 97% of forest land owners are male. The Prince George and Prince Rupert regions have the same distribution as the overall B.C. average.

OCCUPATION CATEGORY (TABLES 50 & 51)

Close to 50% of all forest land owners selected farmer or rancher as their main occupation. The next largest occupation group was retired, accounting for 16% of forest land owners. The third largest group, 8%, described themselves as professionals. The remaining 27% of owners are distributed fairly uniformly amongst the other occupation categories, with the notable exceptions of fisherman and office worker which had a negligible (0%) number of forest land owners. There are considerable differences by forest region. In the Kamloops, Cariboo and Prince George regions, approximately 57% of the forest land owners selected farmer/rancher as their principal occupation. In the Vancouver, Nelson and Prince Rupert regions, considerably fewer forest land owners (11% to 23%) selected this occupation.

Shown in Table 5.1 is the ranking of occupation categories by forest region. An occupation category was ranked if more than 5% of the forest land owners in the region selected that particular category. Using this 5% cutoff rule explains why some regions have only three occupation categories ranked while others have rankings for five or six categories. As illustrated in the table the occupations

of farmer/rancher and retired can be found in the top rankings for all regions.

TABLE 5.1 : RANKING OF SELECTED OCCUPATION BY REGION

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert
Farmer/Rancher	4	1	2	1	1	1
Fisherman	-	-	-	-	-	-
Woodsworker	-	-	-	-	-	6
Wage Earner	-	-	3	3	-	5
Office Worker	-	-	-	-	-	-
Manager/Director	3	3	-	-	-	-
Trades Worker	-	-	4	-	3	7
Business/Commercial	5	-	-	-	-	4
Professional	2	-	-	2	-	2
Homemaker	-	-	-	-	-	-
Retired	1	2	1	4	2	3
Other	-	-	-	-	-	-

Table 51 in Appendix 4 has been tabulated using the occupational data weighted by the amount of forest land owned by each forest land owner. The results provide further evidence as to the importance of the farmer/rancher occupation. Fully 70% of the private forest land in B.C. is controlled by forest land owners who described themselves as farmers or ranchers. The next largest category is retired, followed by the manager/director category: 8% of private forest land is controlled by owners who describe themselves as retired and 7% is controlled by managers/directors.

INCOME DISTRIBUTION (TABLES 56, 57, 58 & 59)

Two questions on income were included in the questionnaire. For one

question, the forest land owner was requested to select the income range which best represented his gross annual income. The lowest income range, less than $10,000, accounted for 9% of all forest land owners; and, the range of between $10,000 and $24,999 accounted for 20% of owners. About 14% of owners selected the range $25,000 to $39,999, while 16% of owners selected the range $40,000 to $54,999. The category with the largest percentage is the $55,000 plus category which was selected by 41% of forest land owners. The overall income distribution indicates a relatively high level of income enjoyed by the average forest land owner. The income distribution is similar when the results are examined by region. The lowest income distribution is found in Nelson while the highest is found in the Kamloops and Cariboo regions. Data for the remaining three regions approximates the overall B.C. average.

When the income data is weighted by the amount of forest land owned by each forest land owner, the results show that 65% of forest land is managed by owners in the $55,000 plus income category. The remaining 35% of forest land is owned as follows: 10% by owners in the $40,000 to $54,999 annual income range; 6% by owners in the $25,000 to $39,999 income range; 14% by owners in the $10,000 to $24,999 income range; and 5% by owners with an annual income of less than $10,000.

For the second income question, forest land owners were asked about the percentage of total income derived from their owned forest lands. A number of comments written in the margin of the questionnaire verified that owners understood the question and, therefore, did not include income from sales of

timber from their provincial woodlot licence lands, or income from timber sold during land clearing operations on non-forestry lands. Seventy-four percent of forest land owners stated that they had received no income derived from their forest lands during the past year. Twenty percent of owners said that income from forest lands comprised up to 10% of their last year's income. A negligible number of owners, 1%, were found to derive more than 50% of their last year's income from their forest lands. The remainder, 5%, derived from 26% to 75% of their income from their forest lands.

Although 74% of owners derived no income from their forest lands last year, these owners accounted for only 52% of the total private forest lands in British Columbia. The 20% of owners who derived up to 10% of their income from their forest lands, owned 42% of the province's private forest lands.

This distribution of percentage of income derived from forest lands differ somewhat when examined on a regional basis. The results showed that the Kamloops, Nelson and Prince Rupert regions had a higher percentage of owners who derived some income from their forest lands last year; while, the Vancouver and Cariboo regions had a lower percentage of owners who derived income from their forest lands during that same time.

EDUCATION (TABLES 52 & 53)

Forest land owners were asked to select the highest level of formal education they had achieved. In general, the forest land owners of B.C. are more highly educated than the average B.C. resident. Overall, 67% of B.C. forest land

owners have completed Grade 12 or higher in formal schooling. Eighteen percent of owners had completed a university degree and a further 7% had attained a college or technical/ vocational diploma or certificate. An additional 13% of owners have had some university, college or technical/ vocational schooling. Ten percent of forest land owners stated they had a trades certificate (journeyman's papers, etc.). Eighteen percent of owners stated that high school was their highest level of formal education completed, and 22% said they had not completed their high school education. Only 11% of forest land owners stated that they had completed 7 years or less of schooling. When more than one education selection was made by the forest land owner, the selections were recoded into the highest category wherever possible. Multiple selections of completed formal programs such as college, technical/ vocational diploma or certificate, trades certificate and/or university degree were recoded as multiple completed formal programs. The multiple selections accounted for 2% of forest land owners.

Forest land owners in the Vancouver and Prince Rupert regions reported noticeably higher education levels than those owners in the other regions. This can be verified through a regional comparison of the percent of owners who had attained a degree, certificate, or diploma or by a comparison of the percent of owners in each region who had completed Grade 12 or higher.

The education data of the forest land owners was weighted by the amount of forest land owned by each owner. Of the private forest land in B.C., 74% is controlled by owners with Grade 12 or higher education. Forty-nine percent of private forest land is controlled by owners with a completed degree, certificate

or diploma. This result can be compared to the above noted results which showed that 67% of forest land owners completed Grade 12 or higher, and 35% of owners have a completed degree, certificate or diploma. In general, forest land owners with Grade 12 or higher education own larger forest land areas than do those owners with less education.

FORESTRY INSTRUCTION (TABLES 54 & 55)

Forest land owners were asked if they had obtained any forestry or logging instruction. The available choices were youth training (4H, Scouts, High School courses, etc.), vocational training (tree planting, logging, etc.), technical training (forest ranger school, forest technologist or technician), university training, experience in forestry or some other forestry instruction. Forty-six percent of all B.C. forest land owners stated that they had no forestry instruction. About 39% of owners stated that their only forestry instruction was years of experience in forestry, and 7% of owners said they had received some form of formal forestry instruction (vocational, technical, university or multiple type of training). The pattern of forestry instruction was similar for all regions.

About 2% of forest land owners selected the "Other" category for which they provided their own answer. For the most part these other answers described training and experience in European forestry methods, and self-study and research into forestry management and methods.

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RESIDENCY (TABLES 6 & 7)

Forest land owners were asked to indicate in which forest region they live. The main purpose of this question was to compare their residency answers to the answers in an earlier question which identified the location of their forest land holdings. The majority of forest land owners reside in the forest region of their forest land holdings. Specifically, 80% of Vancouver forest land owners reside in the Vancouver forest region; 96% of Kamloops forest land owners reside in the Kamloops region; 76% of Nelson forest land owners reside in the Nelson region; 89% of Cariboo forest land owners reside in the Cariboo region; 88% of Prince George forest land owners reside in the Prince George region; and 75% of Prince Rupert forest land owners reside in the Prince Rupert region.

On average, 1% of forest land owners reside outside British Columbia in another Canadian province, and 4% of all B.C. forest land owners reside in another country. This is a somewhat lower percentage than was indicated by the information obtained from the original Phase I mailing list for which 3% of B.C. land owners had addresses outside B.C. but in Canada, and 5% of B.C. land owners had addresses outside Canada. When the residency results were weighted by the amount of forest land owned by each forest land owner, the amount of foreign forest land ownership declined to one percent. Also, about 1% of forest land is owned by forest land owners who are residents of another Canadian province.

KNOWLEDGE OF GOVERNMENT FORESTRY PROGRAMS (TABLES 60 & 61)

Forest land owners were asked if they had any knowledge of the provincial government Woodlot Licence Program and the federal government Private Forest

Lands program. About 28% of forest land owners are familiar with at least one program. This 28% of forest land owners can be further categorized as follows: 7% know about both programs, 19% are familiar with only the Woodlot Licence Program, and 2% are familiar with only the Private Forest Lands Program. The majority of owners, 72%, are not familiar with either program or are not sure if they have heard about the programs.

The results are similar across all forest regions. The majority of forest land owners (54% to 84%) are not familiar with either forestry program. Those familiar with the Private Forest Lands Program range from 15% in the Vancouver and Nelson regions, to 5% of owners in the Kamloops region. In the Prince George region, which accounts for the largest number of forest land owners, 7% are familiar with the Private Forest Lands Program as compared to 14% familiar with the Woodlot Licence Program. Knowledge of the Woodlot Licence Program ranges from 14% of owners in Prince George to 45% in the Cariboo region.

The answers to this question were also weighted by the amount of forest land owned by each land owner. It was found that 73% of private forest lands are controlled by owners who have no knowledge of either forestry program. Seven percent of forest lands are controlled by owners who know about the Private Forest Lands Program, and 26% of forest lands are controlled by owners who have knowledge of the Woodlot License Program.

The question concerning knowledge of these two forestry programs is subject to bias. In the cover letter for the Phase I questionnaire, reference was made to

forestry assistance programs available to private forest land owners. During the course of the Phase I questionnaire an unknown number of land owners became interested in learning more about available forestry programs and other support services. In particular, the 20 land owners who contacted our study group were mailed informational packets describing the Private Forest Lands Programs and the Woodlot License Program. Other land owners contacted the government agencies directly to learn more about the programs. The Phase II follow-up questionnaire was mailed to a random sample of respondents to the Phase I questionnaire. Some of these Phase I respondents had now been exposed to additional information about these two forestry programs. Thus, the knowledge level reported by our study is upwardly biased.

PREFERRED METHODS OF INFORMATION DISTRIBUTION (TABLES 62 & 63)

The forest land owners were asked to select the best ways in which information could be distributed to them. The available choices included: TV advertising, newsletters, radio, local and B.C. newspapers, local area meetings and direct mail. The results reveal a very clear preference for direct mailings (about 50%), followed by newsletters (about 25%), and local area meetings (about 12%). This same ranking of preferences was also found when the results were examined by region.

MEMBERSHIP IN WOODLAND OWNERS' ASSOCIATION (TABLES 8 & 9)

Forest land owners were asked if they were interested in becoming a member of a Woodland Owners' Association which could lead them to better forest management information and for forest product markets. Only 2% of forest land

owners in B.C. stated that they were a member of a Woodland Owners' Association; and, 57% of owners said they would like to belong but they did not know of any association in their area. The remaining 41% of owners indicated that they did not want to join such an association. These results clearly show the potential for Woodland Owners' Associations to attract new members from the population of forest land owners. The greatest interest was expressed by owners in the Kamloops region, as 72% were interested in joining an association. In the Prince George region, which has the largest number of forest land owners and greatest amount of forest land, 50% of the owners expressed interest in joining, and 3% said they belonged to such an association.

The data was also weighted by the amount of owned forest land. The results showed that only 1% of the private forest land in B.C. was controlled by forest land owners who were members of a Woodland Owners' Association. Sixty-six percent of forest land is controlled by owners who are interested in joining such an organization, and the remaining 33% of forest land is owned by owners who are not interested in joining. Of particular note was the Prince George region, where 75% of the private forest land is controlled by owners who expressed interest in joining an association.

5.3 PAST FORESTRY PRACTICES

PAST FOREST MANAGEMENT ACTIVITIES (TABLES 10 & 11)

The forest land owners were asked about the forest management activities they had undertaken during the last 10 years. On average 83% of forest land owners selected at least one forestry activity from the list, and 17% said they had undertaken no forest management activities during the last 10 years. Shown in Table 5.2 below is the ranking of the forest management activities by the forest regions.

TABLE 5.2 : RANKING OF PAST FORESTRY ACTIVITIES BY REGION

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Harvested : Own Use	1	1	1	1	1	1	1
Harvested : Sold	2	2	2	3	3	5	2
Boundary Line	5	4	3	2	2	2	3
Access Road, Trails	3	6	6	4	4	3	4
Improvement Harvest	4	3	5	5	6	4	5
Tree Spacing	6	5	4	6	5	8	6
Fire Protection	7	8	8	-	7	6	7
Vegetation Control	10	-	-	7	-	-	-
Insect Control	-	7	10	10	-	9	-
Site Preparation	-	-	7	-	-	11	-
Forest Mgt. Plan	-	-	-	9	-	7	-
Tree Planting	8	-	9	-	-	-	-
Other Forestry Work	-	-	11	8	-	-	-
Forest Inventory	9	-	-	-	-	10	-
Fertilizing	-	-	12	-	-	-	-

As can be seen in the table, there is general agreement across all forest regions as to the six or seven most important forest management activities undertaken. These activities, in relative order of importance, are: harvesting

timber, logs, poles, firewood, etc. for own use; harvesting timber, logs, poles, firewood, etc. for purposes of selling; boundary line work including fencing and survey lines; developing or maintenance of access roads and/or trails; improvement harvest to remove low quality trees, blowdowns, etc.; tree spacing or thinning of young stands; and fire protection measures such as fire breaks, ponds, pumps. A forest management activity was ranked if more than 5% of the forest land owners of the region had selected that activity.

Clearly, harvesting activities were more frequently undertaken than reforestation activities (site preparation, tree planting) or silvaculture and stand tending activities (spacing, fertilizing, vegetation or insect control, fire protection). Overall, about 75% of forest land owners had undertaken some form of harvesting activity during the last decade; and, only 4% of owners had undertaken tree planting activities during that same time. Several forest land owners appended comments to their questionnaire inquiring how and where they could obtain quality seedlings to reforest certain areas. Three percent of owners added other activities to the forest activities list. The most frequently cited other activity was land clearing for farm or ranch purposes. The second most listed activity was the pruning of Christmas trees.

The data was also weighted by the amount of forest land owned by each forest land owner. Although the rankings changed for some of the activities (harvesting for sales was more important than harvesting for own use), the top six activities remained the same as in the above table.

ACCESS TO FOREST LANDS (TABLES 12 & 13)

Eighty percent of forest land owners claimed to have reasonable access to the major portion of their forest lands; 15% of owners said they have a mixture of reasonable and poor access across their forest lands; and only 5% of owners indicated they have poor access to their forest lands. The Vancouver forest region has the greatest percentage of owners indicating that they have mixed or poor access. The results are similar when examined by the amount of forest land. Eighty-five percent of the private forest land was said to have reasonable access; while only 2% of the total forest land was said to have poor access. In general, forest management activities are not likely to be limited by access problems.

PERSONS RESPONSIBLE FOR FOREST MANAGEMENT ACTIVITIES (TABLES 14 & 15)

Forest land owners were asked to identify who did most of the forest management activities of their forest lands during the last 10 years. The possible selections included: myself and/or members of my family, myself with hired help, a hired crew, and a logging contractor. Forty percent of forest land owners indicated that most of the forestry work was carried out by themselves and/or with members of their family. The second most important category was that of logging contractor, which was selected by 24% of the land owners.

The 2% of owners who selected the answer category "Other" wrote in answers such as: "a friend", "the former owner", "B.C. Forest Service pine beetle control", and "the farm manager". The answer category "Multiple answers" was included to account for the 5% of forest land owners who selected more than one

answer. About 7% of the multiple answers included the selection of logging contractor together with either "myself and members of the family" or "myself and hired help". Thus, information from the multiple answer category further increases the importance of the logging contractor's role in undertaking the forest management activities of the private forest land owner.

When the amount of forest land owned by each forest land owner was taken into consideration, these previously noted results were reversed. That is, on 41% of the private forest land in B.C. the forest management activities were undertaken by a logging contractor, and on 25% of the forest land in B.C. forestry activities were carried out by the owner and their family.

SATISFACTION WITH LOGGING CONTRACTOR (TABLES 20 & 21)

When forest land owners were asked about hiring the services of a logging contractor, 38% indicated they had done so during the last decade. As noted in the results to the previous question, 24% of forest land owners employed the services of a logging contractor to conduct the major portion of their forestry work, while the difference, 14% of owners, had presumably hired a logging contractor for a smaller amount of work. The majority (76%) of forest land owners were either satisfied or mostly satisfied with the services provided by the logging contractor and with any payment received.

Approximately 58% of forest land owners who had hired a logging contractor were satisfied with the services received; and, although 18% of forest land owners were not entirely satisfied they indicated that they would possibly use

the services of the same contractor in the future. The 24% of forest land owners who were not satisfied provided a variety of reasons for their expressed dissatisfaction including:

- "They left a mess. No clean-up was done."
- "We did not receive full remuneration."
- "Didn't clean up and left owing money."
- "Too much damage to small trees and property."
- "Left a big mess and only selected the best."
- "One good contractor and one messy contractor."
- "The logging was done very neatly. But I would not sell timber again as price is too low to make it worthwhile."

Several of the respondents who indicated that they were satisfied with the services of the logging contractor appended additional comments to their answer such as: "the logging was very expert" and "very neat work." It is difficult to reconcile these two extremes of opinions. One possible explanation is that some or most logging contractors provided excellent or satisfactory services, while a smaller group of contractors provided unsatisfactory services. Another explanation could be that the expectations of most forest land owners were modest or easily satisfied, while a smaller group of forest land owners had greater expectations concerning the harvesting of their timber. A blending of these two possible explanations could also help reconcile the extremes in responses.

It is interesting to note that the 38% of forest land owners who had employed a logging contractor, control about 62% of the private forest land in British Columbia. Therefore, owners of larger tracts of forest land are more likely to employ the services of a logging firm than those who own smaller areas of forest land.

PORTION OF FOREST LAND HARVESTED (TABLES 16 & 17)

About one quarter of forest land owners indicated that they had undertaken no harvesting activities of any type on their forest lands during the last 10 years. (A few owners noted that the previous land owner had harvested timber, but they themselves had not done so.) Of the 75% of owners who had harvested, the majority, 54%, had harvested less than 25% of their total forest land holdings. Only 11% of harvesting owners had harvested 75% or more of their forest lands.

For those who had harvested during the last decade, 21% had harvested less than 5 hectares of forest land, 21% had harvested from 5 to 19 hectares of forest land, 26% had harvested from 20 to 49 hectares, 11% had harvested from 50 to 99 hectares, and 22% had harvested 100 or more hectares of forest land. The lowest levels of harvesting were undertaken in the Nelson and Prince George regions, and the more active areas for harvesting were the Kamloops and Cariboo regions.

HARVESTING METHODS (TABLES 18 & 19)

For those forest land owners who had harvested timber during the last 10 years, the most often selected methods were diameter limit (only trees over a minimum diameter were removed) and land clearing operations (trees were harvested to clear the land for a use other than forestry purposes). These harvesting methods were closely followed by the selection method (only pre-selected marked trees were removed) and the clearcut method (most or all the trees in a given area were removed). About 14% of forest land owners were unable to identify a

single most important harvesting method, but instead selected combinations of the aforementioned. More than 80% of these multiple answers included land clearing operations. The categories clear cutting and diameter limit were each chosen in equal proportion (40%) in these multiple answers. Of the forest land owners, 7% included a new answer category for the harvesting method. All other answer categories described small scale harvesting or salvaging of dead wood, blowdowns, windfalls, removal of insect killed trees, etc. for use as firewood, poles, and/or fenceposts.

When the data was weighted by the amount of forest land owned by each forest land owner, the clearcut method of harvesting became the most important method, followed by the diameter limit and land clearing methods.

WOOD PRODUCTS SOLD (TABLES 22 & 23)

Approximately 50% of forest land owners indicated that they had sold at least one wood product during the last 10 years. Sawlogs were the product most often sold, as indicated by 88% of the forest land owners. Owners were asked to select the appropriate categories of wood products sold during the last 10 years. The vast majority of owners with sales indicated that only sawlogs had been sold. The next most important products were firewood, and fenceposts or poles. Shown in Table 5.3 is the ranking of wood products sold by region. When the amount of forest land owned by each forest land owner was taken into consideration, the importance of sawlogs increased. Sales of "Other" wood products such as peeler logs, poplar for waferboard, birch for furniture, hydro poles, shakes, patio rings and sawed lumber were listed by 2% of forest land owners.

TABLE 5.3 : RANKING OF WOOD PRODUCTS SOLD BY REGION

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Sawlogs	1	1	1	1	1	1	1
Firewood	4	2	4	2	-	2	2
Fenceposts, Poles	3	4	3	-	2	4	3
Xmas Trees	5	3	2	-	-	7	4
Pulpwood	2	5	-	-	-	5	5
Railroad Ties	-	-	5	-	-	3	6
Other	-	-	-	-	-	6	-

A wood product category was ranked if more than 5% of the forest land owners in the region selected the category. This explains why some regions have only two wood products ranked while others have rankings for five or more products.

METHOD OF SELLING WOOD PRODUCTS (TABLES 24 & 25)

The most often selected method of selling timber and other wood products was that of delivering logs to the buyer. This is consistent with the previously observed result that sawlogs were the most common product sold. Sales of standing timber were the second most common method of selling wood products. These were the only two sales methods of any overall importance. Roadside sales methods were most often used for selling firewood or Christmas trees. The most commonly selected multiple answers were "delivering logs to buyer" and "delivering other wood products to buyer", as more than 90% of the owners who had a multiple answer selection made this selection.

REASONS FOR NOT SELLING WOOD PRODUCTS (TABLES 26 & 27)

Approximately 50% of forest land owners did not sell any wood products during the last decade. These owners were asked to list up to three reasons, from a list of 12 choices as to why they had no sales. The principal reason selected was "I only cut wood for my own use". The next most important reason indicated by the respondents was "I do not want my trees cut". This was followed by the reason "I am too busy with other activities". Economic factors concerning the value of the wood product and/or product price were fourth and fifth on the list of reasons. Reasons that were seldom listed included: can't find a buyer; access or road problems; increased income would decrease my old age pension; can't do the work myself and am unable to find reliable workers. About 10% of the forest land owners who had no sales included other reasons such as:

- "Only recently purchased the land."
- "Just bought the land."
- "Logged in 1973, will log again in 1993."
- "Next harvest in 2010."
- "To avoid taxation on harvested timber."
- "Husband's death."

There were no readily identifiable obstacles preventing forest land owners from selling wood products. The main reasons for not selling wood products appeared to be the decision of the forest land owner not wanting to cut trees or not wishing to harvest timber for purposes other than his own needs.

5.4 MANAGEMENT OBJECTIVES

FUTURE FORESTRY ACTIVITIES (TABLES 28 & 29)

Forest land owners were asked to select, from a list of 15 forestry activities, those activities they expected to carry out during the next 10 years. About 10% of forest land owners indicated that they were not planning any forestry activities during the next decade. This 10% can be compared to the 17% of forest land owners who indicated that they had not undertaken any forestry activities during the last 10 years. The remaining 90% of forest land owners selected at least one activity. Shown in Table 5.4 is the ranking of future forestry activities by region. Only activities that were selected by more than 5% of forest land owners in a region were ranked.

TABLE 5.4 : RANKING OF FUTURE FORESTRY ACTIVITIES BY REGION

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Harvested : Own Use	1	2	1	1	1	1	1
Harvested : Sold	2	3	3	2	2	4	2
Improvement Harvest	3	1	2	3	3	2	3
Tree Spacing	4	4	4	4	5	3	4
Boundary Line	7	5	8	5	4	5	5
Site Preparation	6	8	6	6	7	8	6
Tree Planting	5	10	5	8	6	7	7
Access Road, Trails	8	6	13	11	10	6	8
Forest Mgt. Plan	10	9	12	12	9	10	9
Forest Inventory	11	12	7	9	8	11	10
Insect Control	14	7	9	10	-	9	11
Fire Protection	9	11	11	13	11	-	12
Vegetation Control	12	-	-	7	-	12	13
Other Forestry Work	13	-	10	-	-	13	-
Fertilizing	-	-	14	-	-	-	-

The future plans of the forest land owners appear optimistic, as several activities were selected by most land owners. It is of interest to compare the results of Table 5.4 to those of Table 5.2 - past forestry activities. Although harvesting activities remain the most important to forest land owners, tree planting and site preparation activities have increased in importance as compared to the amount previously undertaken. Also, the development of a forest management plan, and the completion of a forest inventory were now ranked ahead of insect, fire and vegetation control activities.

About 2% of forest land owners included additional activities to the list. The most often cited activities were land clearing operations for farm or ranch purposes and Christmas tree pruning. Also, a few owners indicated that their future intention was to sell the land.

FUTURE SALES OF WOOD PRODUCTS (TABLES 30 & 31)

About 44% of forest land owners expect to sell wood products in the next 10 years. The primary reason given for not selling wood products in the future was that the wood was cut solely for own use. About 8% of owners said that they would not have future sales because there would be no trees to cut. Again there was no readily identifiable obstacle preventing the majority of forest land owners from selling their wood products.

About 8% of owners included reasons which could be categorized as "maybe". Again several owners indicated that their future intention was to sell the land,

not just the timber. Some typical other reasons included:

- "Maybe, if no damage done in getting the trees."
- "If price is high enough I might sell poplar."
- "Maybe. Would only cut trees on a selective basis and only if land would look better after logging, not worse. The money isn't worth a mess."
- "Maybe some aspen to waferboard plant."
- "If I don't sell timber, I'll cut posts to sell."
- "Yes, if I still own it, and trees get large enough."
- "No, want to sell land."
- "Maybe, hope to sell soon."
- "Maybe, if I can get someone to selectively log and not leave a mess."

Earlier results showed that about 50% of forest land owners had sold some wood product during the past 10 years. The majority of those with no past sales had said they only cut wood for their own use or did not want their trees cut. The future sales expectations parallel the observed past sales behaviour.

FUTURE HARVESTING FOR OWN USE (TABLES 32 & 33)

Although 62% of forest land owners expect to harvest some wood products for their own use during the next decade, 20% were uncertain of their future plans. The remaining 18% had no plans to harvest wood products for their own use. Nelson was the only forest region where this result was substantially different as less than 50% of forest land owners expect to harvest timber for their own use. The Vancouver region had the most optimistic expectations as 70% of owners indicated they expect to harvest timber for their own use.

PURCHASE/LEASE ADDITIONAL FOREST LANDS (TABLES 34 & 35)

About 55% of forest land owners would consider buying or leasing additional forest lands if the price was reasonable. This implies that the remaining 45% are

either satisfied with the amount of their land holdings or would be interested in selling off some or all of their forest lands. Several forest land owners appended remarks to the questionnaire explaining that they had been attempting for some time to sell their forest and other lands but could not find a buyer and were therefore not interested in purchasing more forest land. In the Vancouver region, only 32% of forest land owners want to purchase additional forest land.

REPLANTING CUTOVER OR SCRUB LAND (TABLES 36, 37, 40 & 42)

An examination of past forestry practices has revealed that reforestation activities were not frequently undertaken. Nevertheless, when asked about planting their cutover or scrub lands, 43% of forest land owners indicated that they were interested in having their lands reforested. Only about 15% of forest land owners had selected tree planting as an activity that they expect to complete on their forest lands during the next 10 years. Perhaps some of these forest land owners are willing to have their cutover or scrub lands reforested but are not willing or able to undertake the planting themselves. Thirty-five percent of forest land owners interested in reforestation wanted less than 25% of their forest lands planted, and 31% of owners wanted 25% to 49% of their forest land planted. The remaining 34% of owners interested in reforestation wanted more than 50% of their total forest land planted.

A further 19% of forest land owners indicated that tree planting was not appropriate, presumably because they had no cutover or scrub land to plant. Thirty-eight percent of owners said they would not consider having their forest lands reforested. Of those owners interested in reforestation, 38% wanted less

than 20 hectares planted, 27% want from 20 to 49 hectares planted, and 35% wanted 50+ hectares planted.

CLEARING FOREST LANDS FOR ANOTHER USE (TABLES 38, 39, 41 & 43)

About 45% of forest land owners would like to clear some of their forest lands for a use other than forestry. The remainder, 55%, said they had no interest in clearing any of their forest lands for another purpose. For those who wanted to clear some of their forest lands, about 45% wanted to clear less than 25% of their total forest lands, and 30% wanted to clear from 25% to 49% of their forest lands.

In terms of hectares to be cleared, 44% of these owners want to clear less than 20 hectares, 23% want to clear from 20 to 49 hectares, and 33% of owners want to clear 50+ hectares.

MOST IMPORTANT BENEFIT IN NEXT 10 YEARS (TABLES 44 & 45)

Forest land owners were asked to identify the most important benefit they expected to derive from their forest lands during the next 10 years. The most important benefit identified was either farm/ranch or domestic use. This finding was consistent with a similar result in the Phase I questionnaire for which forest land owners indicated that their primary reason for owning land was for farm/ranch purposes; and, their second most important reason for owning land was that is was part of their principal residence. The second most important benefit anticipated during the next 10 years was aesthetic enjoyment. This was followed

by income from timber sales, and an increase in land value. The most often cited "Other" benefit was "sale of the land".

When the amount of forest land owned by each forest land owner is taken into consideration, the top three benefits are from farm, ranch or domestic use, income from timber sales, and increase in land value, respectively.

About 10% of forest land owners unable to identify one most important benefit, selected a combination of benefits. About 60% of these multiple answer responses incorporated aesthetic reasons and more than 50% included farm/ranch or domestic use. Income from timber sales was included in 45% of these multiple answers.

MAJOR OBSTACLES FOR FOREST LAND OWNERS AND OTHER COMMENTS

The questionnaire included an area for comments. The forest land owners were invited to describe the major barriers they faced in the management of their forest lands, as well as on any other areas of concern. Close to 50% of all respondents provided additional comments. The additional information and comments appended were quite varied and ranged from a very detailed description of the individual forest land parcels, or a detailed family history of the land ownership, to emotionally charged statements of a political, environmental or economic nature. Most of the forest land owners succinctly stated one or two major concerns or problems.

A SURVEY OF PRIVATE FOREST LAND OWNERS IN BRITISH COLUMBIA : AUGUST 1988

This section is included in the report to provide a general indication of the wide range of concerns reported by the forest land owners. No estimates have been provided of the number or percentage of owners reporting each concern. Where similar comments were reported by many respondents, two or three versions were included to emphasize its importance. In some instances the owners' comments have been edited for the sake of brevity or confidentiality, but every effort was taken to ensure that the essence of the comment remained unchanged, as well as to ensure that the confidentiality of the respondent was not jeopardized.

Some of the shorter comments concerning the major obstacles to forest land management, and other relevant comments, are listed below.

Financial and economic factors included:

- "Major obstacle-- money."
- "Major barrier, of course, is lack of funding."
- "Getting trees to plant at a reasonable rate, and land preparation costly. Money assistance in general."
- "Major barriers I face in managing my forest land is lack of money and equipment."
- "The high cost of clearing land, hiring equipment and labor."
- "What benefits would replanting land to forests do for me over the next 20 years, as I have put a lot of money to have this land put into agricultural use?"
- "No markets for minor products and pulp and high costs of stand tending."
- "Major barrier to me is Marketing. We need a private land owners marketing co-operative or association. Also need simple lists of specs for marketing different species, quality, kinds (poles, pilings, etc.) bucking to length and minimum diameter. We need knowledge, mechanisms.

Tree planting and site tending factors included:

- "I want to know where I can get help and trees for planting."
- "I wish there was more information and assistance available on how to plant seedlings and improve land for future generations. It's easy to harvest but not so easy to know what to do for long range planning."
- "More information on tree varieties to plant."
- "Could use some assistance re: fertilization and insect control."
- "Insect damage and control would be our greatest concern."
- "My major current concern is management of bug infestation and disposal of bug infested trees, and the protection of my trees and the trees in the surrounding area."
- "At present, fire is a severe hazard due to both dry climatic cycle and beetle kill. Arson has been a serious threat."
- "The property is on an island so access is difficult together with finding someone to log it."
- "Access is the only barrier to managing my forest lands efficiently."
- "Problems with selective logging with present day equipment and long logs (tree length)."
- "Logging should be done with smaller equipment, more care and less waste."

Government, political or taxation factors included:

- "Major problem is prolific data requirements by Ministry of Forests and B.C. Assessment Authority."
- "Taxes are increasing too fast to make any improvements possible at this time."
- "Land has to be used in conjunction with agriculture or the taxes will kill you. Too long between harvests. Would do more planting if some form of help was available."
- "Major barrier is provincial property taxation based on unrealized value instead of income."
- "Major barrier: to pass the property intact to my children. The capital gains tax may make it impossible as only 10 acres are exempt."
- "If it is profitable to raise timber and there are planting or assistance programs it should be advertised as there are many people holding land that would not realize the potential."
- "I feel the Crown forest land management should be improved first."
- "I would not trust the bureaucrats in Forest Service to have any say in how I manage my Forest Lands. They haven't learned yet that a long term sustained yield forestry objective is the best forestry practice rather than large scale cutting to service social objectives of the province.

Environmental concerns included:

- "I believe that too many trees are being removed from our farming area. I have seen a steady escalation of wind erosion due to fewer trees."
- "I still believe that the animals and birds need someone to look after forest land for their use."
- "Most of the trees are on very steep and rough ground. The quite dense trees and underbrush provide a sanctuary for considerable wildlife."
- "My private forest is for shelter for livestock and wildlife. Wood from my Woodlot License has been sold to local mills."
- "Present forest land should be conserved, maintained to keep the environment viable. No strip mining. No pesticides/herbicides."

Other comments included:

- "My main problem is other people cutting wood on my property. When I catch them at it, their reply is that it is not completely fenced so they didn't know it was private property."
- "Illegal wood cutters cut approximately 15 acres of my property."
- "Encourage formation of associations and establish formal links between information sources and associations."
- "A major barrier is time and inexperience in forestry. But that is offset by a genuine interest in trees and their cause."
- "The major barrier for most ranchers is that our timber areas are too small to make them viable for much more than farm use; and the fact that we do not have the resources or knowledge to properly manage the timber."
- "Need additional cutting rights, in addition to my private lands. I have made 2 applications and have been rejected because of non-availability of quota. With a Crown based woodlot I could afford to improve my adjacent forest lands.
- "As a rancher I would like to see more of the Woodlot Licenses issued as I feel the major forest companies do not have the time to put into the land what they take out."
- "Major barrier: getting an RPF interested in so small a parcel as 80 acres in order to get a survey done. Also you need 3 proposals if you can't get an RPF. Also, constantly being approached by logging contractors and not really knowing the value of timber and percentage entitlement due to me, as the landowner."
- "We also run a small sawmill which recovers lumber and fencing from unsalable wood, chunks, snags, etc."
- "I would like to grow and raise some trees on my property for future selling and cutting, but I do not know who a person should discuss this with or what should be done about it."

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APPENDIX 1 : PHASE I : B.C. LAND OWNERS QUESTIONNAIRE

C. E. WETTON ASSOCIATES INC.
1473 FINLAYSON PLACE
VICTORIA, BRITISH COLUMBIA V8T 2V8
PHONE (604) 595-2202

October 1987

Dear Land Owner:

You have been selected to participate in a Land Use Study. You are among a group of randomly selected property owners who own at least 50 acres of land in the province of British Columbia. Because you own a significantly large area of land, we are asking for your assistance and just a few minutes of your time in answering the attached Questionnaire. Even if your property has no forest land, please complete and return the Questionnare. **The main purpose of this study is to determine the extent of privately owned land in the province of British Columbia that is currently forested or has forestry potential.**

Forestry is the number one industry in this province. Initial estimates suggest that over **4 million acres of potentially productive forest land are owned by private land owners such as yourself.** Private land owners play an increasingly important role in the future of this forest industry. In other provinces of Canada, private land owners already play a major role in forest management policies, timber production and reforestation.

C.E. Wetton Associates Inc. is an independent consulting firm that has been operating in the province of British Columbia since 1978. The firm has been hired by the Canadian Forestry Service, Government of Canada to conduct an independent study of the extent of forest land in British Columbia held by private property owners. This information will be used in developing assistance and subsidy programs for private forest land owners. It is the policy of our firm to provide the overall picture of the topic being studied — in this particular case the extent of privately held forest land — but **never** to release individual names and addresses or answers. Your individual answers to the attached questionnaire will be handled in a strictly confidential manner by this firm.

I would appreciate just a few minutes of your time and ask that you complete the attached Questionnaire. A postage paid envelope is enclosed for your answers. Your answers are essential to providing a more complete understanding of the role of private land owners in the future of our province.

Thank you for your time and assistance.

Yours truly,

C. E. Wetton

C.E. Wetton,
President

C.E. WETTON ASSOCIATES INC.
1473 FINLAYSON PLACE
VICTORIA, BRITISH COLUMBIA V8T 2V8
PHONE (604) 595-2202

December 1987

Dear Land Owner:

You are among a group of property owners selected to receive a copy of the B.C. Land Use Questionnaire. Your copy of the Questionnaire should have reached you during the first week of November. In the event the earlier letter did not reach you, or your first copy of the Questionnaire was mislaid, a second copy of the Questionnaire is enclosed. Although your participation in the study is voluntary, **your answers are essential to providing a more complete understanding of the role of private forest land owners in the future of our province**.

If you have already returned your Questionnaire, please accept my thanks for your assistance and cooperation. If you have not yet completed the Questionnaire, I ask you to participate in this study by returning the completed Questionnaire in the enclosed postage paid envelope. Even if your property has no forest land, please complete and return the Questionnaire.

The main purpose of this study is to determine the extent of privately owned land in the province of British Columbia that is currently forested or has forestry potential. This study is being conducted by the independent consulting firm C.E. Wetton Associates Inc. under contract to the Canadian Forestry Service, Government of Canada. **This information will be used in developing assistance and subsidy programs for private forest land owners**. Your individual answers to the attached questionnaire will be handled in a **strictly confidential** manner by this firm.

Private forest land owners play an increasingly important role in the B.C. Forest Industry. In other provinces of Canada, private land owners already have a major role in forest management policies, timber production and reforestation. The time is near when British Columbia forest land owners will be in a position to lead the way into a new era of intensive, environmentally oriented forest land management.

I would appreciate just a few minutes of your time and ask that you complete the attached Questionnaire. A postage paid envelope is enclosed for your answers. Your answers are very important to this study.

Thank you for your time and assistance. I wish you and your family Peace and Prosperity in the New Year.

Yours truly,

C. E. Wetton

C.E. Wetton,
President

BRITISH COLUMBIA LAND USE QUESTIONNAIRE

October 1987

Forestry is British Columbia's number one industry. Private forest land owners play an increasingly important role in the future of this forest industry. Your assistance is requested in this study of British Columbia's private land owners to provide a more complete understanding of the role of private forest land in our future.

Thank you for your time and help. **Your answers will be held strictly confidential.**

1. How many acres of land do you own in the province of British Columbia?

   _____ Acres (Include the total acreage of all land parcels where you are listed as a legal owner, even though you might only own a portion (eg. 1/2) of the land parcel.)

2. How much of this land is FOREST land?

   _____ Acres (Include land that has trees growing on it, cutover land or replanted forest land. Do not include land that is too steep, rocky or wet for growing trees.)

3. How many individual parcels of land make up this FOREST land?

   _____ Parcels

☆ ☆

☆ ☆

Records show that you are listed as the legal owner of the above property. The next few questions concern only this specific property and not other properties you might also own.

(If the information on the label is not correct please note any required changes.)

BRITISH COLUMBIA LAND USE QUESTIONNAIRE
October 1987

The next few questions concern only the property that is listed at the bottom of the previous page.

4. Do you still own this property?

☐ Yes
☐ No (If you no longer own this property, please answer the following questions as best as you recall.)

5. How much of this property is FOREST land?

_____ Acres (Include land that has trees growing on it, cutover land or replanted forest land. Do not include land that is too steep, rocky or wet for growing trees.)

6. During the last 10 years, have you ever harvested timber or other wood products (eg. firewood or fenceposts) from this property?

☐ Yes
☐ No

7. What are your reasons for owning this property?
(Please rank in order of importance those reasons that apply to you. 1 = Most Important Reason; 2 = 2ND Most Important Reason; 3 = 3RD Most Important Reason)

_____ Land investment (hope to sell all or part of this property at a profit)
_____ Part of my farm operation
_____ Timber production (plan to sell wood products)
_____ Source of wood products for my own use (firewood, fenceposts, etc.)
_____ Part of my principal residence
_____ For my second residence (my summer residence or future retirement home)
_____ Rent all or part of the land for rental income
_____ Personal recreation (hunting, fishing, camping, etc.)
_____ Inherited the property and have no firm plans for its use
_____ Other (Please specify reason) _____

_____

Thank you for your time and assistance. Please return the Questionnaire in the enclosed postage paid envelope.

APPENDIX 2 : PHASE I RESULTS TABLES

APPENDIX 2 : PHASE I RESULTS TABLES

The following technical notes apply to the results tables found in this appendix.

* In all tables, the percentages may not sum to 100% due to rounding.

* The definition of Rural Land Owner refers to owners of residential or farm land in a rural area of B.C. The owner must own a minimum of 20 hectares of rural land. This study excluded all land owners with less than 20 hectares of rural land as well as land owners who owned more than 2,000 hectares of forest land.

* The definition of Forest Land Owner refers to owners of at least 20 hectares of forest land. Forest Land Owners are a subset of Rural Land Owners. The forest land is not restricted to rural areas or to residential or farm property classifications. The Forest Land Owner must also own at least one rural farm or rural residential property (of at least 20 hectares in size) to have qualified for the initial selection.

* The reference to wood products (Question 6) refers to all timber and wood products including sawlogs, peeler logs, pulp logs, pilings, railroad ties, poles, fenceposts, firewood, etc.

* Results have been weighted so that a provincial representation is achieved. Two major types of weighting have been used. The first weighting scheme weights by the number of land owners who are estimated to correspond to each of the relevant categories. The second weighting scheme, weights by the total hectares of forest land estimated to apply to each category.

* Tables 4 through 20 are generated on the basis of all Rural Land Owners and/or their associated forest lands.

* Tables 21 through 37 are generated on the basis of all Forest Land Owners and their associated forest lands. This second set of tables has removed the minor effect of land owners with less than 20 hectares of forest land.

APPENDIX 2 : PHASE I RESULTS TABLES

TABLE 1 : ESTIMATED NUMBER OF SMALL PRIVATE (NON-INDUSTRIAL) FOREST LAND OWNERS IN B.C. (THESE OWNERS MUST OWN AT LEAST ONE 20 HECTARE LAND PARCEL WHICH IS CLASSIFIED AS RESIDENTIAL OR FARM LAND AND IS IN A RURAL AREA)

	# Rural Farm & Residential Land Parcels: ≥ 20 ha. Land	# Rural Farm & Residential Land Owners: ≥ 20 ha. Land	# Rural Forest Land Owners: ≥ 20 Hectares Forest Land	95% ± Confidence Limits
Forest Region				
Vancouver	2,322	2,132	1,457	± 103
Kamloops	6,514	5,177	3,620	± 349
Nelson	2,880	2,623	2,075	± 113
Cariboo	5,633	4,392	3,570	± 224
Prince George	13,543	12,657	8,908	± 842
Prince Rupert	2,656	2,186	1,621	± 108
Total	33,548	29,167	21,251	± 957

TABLE 2 : ESTIMATED TOTAL HECTARES OF FOREST LAND IN B.C. BASED ON A SAMPLE OF SPECIFIC RURAL RESIDENTIAL AND FARM PROPERTIES (QUESTION 5)

	Total Hectares Forest Land	95% ± Confidence Limits	# Rural Farm & Residential Land Parcels: ≥ 20 Ha. Land
Forest Region			
Vancouver	66,500	± 7,400	2,322
Kamloops	181,000	± 35,300	6,514
Nelson	99,400	± 10,300	2,880
Cariboo	158,500	± 23,800	5,633
Prince George	433,200	± 89,300	13,543
Prince Rupert	80,800	± 8,300	2,656
Total	1,019,400	± 100,000	33,548

APPENDIX 2 : PHASE I RESULTS TABLES

TABLE 3 : ESTIMATED TOTAL HECTARES OF FOREST LAND IN B.C. BASED ON PROPERTY OWNER ESTIMATES OF TOTAL FOREST LAND HOLDINGS (QUESTION 2)

	Total Hectares Forest Land	± 95% Confidence Limits	# Rural Farm & Residential Land Owners: ≥ 20 Ha. Land
Forest Region			
Vancouver	145,600	± 38,900	2,132
Kamloops	807,300	± 273,000	5,177
Nelson	245,000	± 59,400	2,623
Cariboo	737,300	± 237,300	4,392
Prince George	1,966,300	± 844,000	12,657
Prince Rupert	184,400	± 42,900	2,186
Total	4,085,900	± 922,000	29,167

APPENDIX 2 : PHASE I RESULTS TABLES

TABLE 4 : ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY TOTAL HECTARES OF LAND OWNED BY FOREST REGION (QUESTION 1)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0 - 19	1	1	1	0	0	0	0
20 - 49	49	27	30	11	8	21	18
50 - 99	28	22	28	27	19	35	23
100 - 199	13	19	18	17	18	19	18
200 - 399	5	12	12	21	27	16	20
400 +	5	19	12	24	28	10	21
Total	100	100	100	100	100	100	100
Average # Hectares Land by Region	108	374	176	454	538	181	406

TABLE 5 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY TOTAL HECTARES OF LAND OWNED BY FOREST REGION (QUESTION 1)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0 - 19	0	0	0	0	0	0	0
20 - 49	15	2	7	1	1	5	2
50 - 99	18	4	13	5	4	15	6
100 - 199	16	9	14	6	6	15	8
200 - 399	10	13	16	13	16	22	15
400 +	42	72	50	75	74	43	70
Total	100	100	100	100	100	100	100

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TABLE 6 : ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY TOTAL HECTARES OF FOREST LAND HOLDINGS BY FOREST REGION (QUESTION 2)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0	5	15	7	6	20	7	14
1 - 9	8	6	6	3	3	9	5
10 - 19	19	8	8	9	7	9	9
20 - 29	19	11	13	11	7	10	10
30 - 39	8	7	12	7	5	13	7
40 - 49	12	8	13	14	6	11	9
50 - 74	13	9	14	9	12	12	11
75 - 99	4	6	5	9	6	6	6
100 - 199	8	10	11	14	16	15	13
200 - 399	1	9	8	8	10	6	8
400 +	4	12	4	11	7	3	8
Total	100	100	100	100	100	100	100
Average # Hectares Forest Land Owned by Region	68	156	93	168	155	84	140

TABLE 7 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY TOTAL HECTARES OF FOREST LAND HOLDINGS BY FOREST REGION (QUESTION 2)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0 - 9	1	0	0	0	0	1	0
10 - 19	4	1	1	1	1	2	1
20 - 29	6	2	4	2	1	3	2
30 - 39	4	1	4	1	1	5	2
40 - 49	8	2	6	4	2	6	3
50 - 74	12	3	9	3	5	9	5
75 - 99	5	3	4	4	3	6	4
100 - 199	16	9	15	11	14	23	13
200 - 399	4	14	22	13	17	16	15
400 +	41	64	34	61	56	30	56
Total	100	100	100	100	100	100	100

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TABLE 8 : ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY PERCENTAGE OF TOTAL LAND HOLDINGS THAT ARE FOREST LANDS BY FOREST REGION (QUESTION 2 / QUESTION 1)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	5	13	7	6	19	6	13
1 - 24	10	17	10	17	26	21	20
25 - 49	19	21	23	38	26	20	26
50 - 74	22	26	23	25	16	27	21
75 - 99	32	19	27	11	10	21	16
100	13	5	9	3	3	6	5
Total	100	100	100	100	100	100	100
Average % by Region	63%	42%	53%	37%	29%	46%	34%

TABLE 9 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY PERCENTAGE OF TOTAL LAND HOLDINGS THAT ARE FOREST LANDS BY FOREST REGION (QUESTION 2 / QUESTION 1)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	0	0	0	0	0	0	0
1 - 24	2	7	2	12	25	9	16
25 - 49	8	32	18	26	22	18	24
50 - 74	21	38	26	47	17	25	28
75 - 99	54	20	46	14	30	34	27
100	16	3	8	1	6	13	5
Total	100	100	100	100	100	100	100

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TABLE 10: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY NUMBER OF PARCELS OF FOREST LAND OWNED BY FOREST REGION (QUESTION 3)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
# Parcels							
0 Parcel	6	13	7	6	20	7	14
1 Parcel	49	38	47	28	28	46	34
2 - 4 Parcels	35	27	31	35	36	39	34
5 - 9 Parcels	7	12	12	17	10	5	11
10 - 19 Parcels	1	6	2	9	6	3	5
20 + Parcels	2	4	1	5	0	1	2
Total	100	100	100	100	100	100	100
Average # Parcels by Region	2.7	4.0	2.6	5.6	2.6	2.5	3.3

TABLE 11: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY NUMBER OF PARCELS OF FOREST LAND OWNED BY FOREST REGION (QUESTION 3)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
# Parcels							
0 Parcel	0	0	0	0	0	0	0
1 Parcel	24	8	20	5	11	17	11
2 - 4 Parcels	30	16	26	14	31	39	24
5 - 9 Parcels	11	21	30	19	22	12	21
10 - 19 Parcels	10	28	16	22	33	16	27
20 + Parcels	25	26	9	41	3	15	18
Total	100	100	100	100	100	100	100

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TABLE 12: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS WHO STILL OWN THE RANDOMLY SELECTED 20+ HECTARE PROPERTY BY FOREST REGION (QUESTION 4)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Still Owner	99	97	98	97	97	99	98
No	1	3	2	3	3	1	2
Total	100	100	100	100	100	100	100

TABLE 13: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY SIZE OF SELECTED PARCEL BY FOREST REGION (SELECTED PARCEL)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 29	32	18	21	8	5	12	12
30 - 39	25	17	19	15	5	15	12
40 - 49	14	9	10	8	5	7	7
50 - 74	23	42	30	52	59	50	49
75 - 99	3	2	6	6	3	6	4
100 - 199	2	8	14	10	18	9	13
200 - 399	1	3	1	1	5	2	3
400 +	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100
Average # Hectares in Selected Parcel by Region	46	59	61	64	84	62	70

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TABLE 14: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY HECTARES OF FOREST LAND IN SELECTED PARCEL BY FOREST REGION (QUESTION 5)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0	7	21	9	10	28	10	19
1 - 9	11	8	11	10	10	13	10
10 - 19	20	13	13	24	13	15	15
20 - 29	25	16	18	18	14	14	16
30 - 39	11	16	13	10	9	14	11
40 - 49	13	6	14	13	6	17	9
50 - 74	11	15	14	10	11	13	12
75 - 99	1	1	3	2	2	3	2
100 - 199	1	2	5	3	6	2	4
200 - 399	0	1	0	0	2	0	1
400 +	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100
Average # Hectares Forest Land in Parcel by Region	29	28	35	28	32	30	30

TABLE 15: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY PERCENTAGE OF SELECTED LAND PARCEL THAT IS FOREST LAND BY FOREST REGION (QUESTION 5 / SELECTED PARCEL)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	7	19	9	10	27	9	19
1 - 24	8	13	9	18	18	17	16
25 - 49	17	16	17	28	20	19	20
50 - 74	21	21	23	25	15	26	20
75 - 99	30	18	27	14	11	19	16
100 +	18	14	14	6	9	10	10
Total	100	100	100	100	100	100	100
Average % by Region	63%	47%	57%	44%	38%	48%	43%

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TABLE 16: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS WHO CUT WOOD PRODUCTS FROM THE RANDOMLY SELECTED 20+ HECTARE PROPERTY DURING THE LAST 10 YEARS BY FOREST REGION (QUESTION 6)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Cut Wood	66	59	60	66	37	60	51
No	34	41	40	34	63	40	49
Total	100	100	100	100	100	100	100

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TABLE 17: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY REASONS FOR OWNING THE SELECTED 20+ HECTARE PARCEL (QUESTION 7)

(RURAL LAND OWNERS : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Reasons			
Land Investment	7	13	13
Farm/Ranch Operation	56	19	4
Timber to Sell	3	13	15
Timber for Own Use	0	17	30
Principal Residence	20	17	5
2ND Residence	5	5	5
Rental Income	2	5	7
Personal Recreation	2	7	15
Inheritance	4	2	1
Other Reason	2	2	4
Total	100	100	100
Non Response	17%	45%	61%

TABLE 18: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY REASONS FOR OWNING THE SELECTED 20+ HECTARE PARCEL (QUESTION 7)

(FOREST LAND HOLDINGS : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Reasons			
Land Investment	6	10	15
Farm/Ranch Operation	71	12	1
Timber to Sell	6	25	17
Timber for Own Use	0	28	24
Principal Residence	10	12	26
2ND Residence	2	2	2
Rental Income	2	5	3
Personal Recreation	0	4	8
Inheritance	1	1	1
Other Reason	2	1	3
Total	100	100	100
Non Response	15%	41%	61%

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TABLE 19: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY PRINCIPAL REASON FOR OWNING THE SELECTED 20+ HECTARE PARCEL BY FOREST REGION (QUESTION 7)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Reasons							
Land Investment	15	12	10	4	4	5	7
Farm/ Ranch	26	60	37	66	63	41	56
Timber to Sell	10	2	8	1	3	3	3
Timber Own Use	0	0	1	0	0	0	0
Principal Residence	19	16	25	19	17	33	19
2ND Residence	8	3	8	5	4	9	5
Rental Income	2	0	0	1	3	0	2
Personal Recreation	4	2	3	1	1	2	2
Inheritance	6	3	7	2	4	4	4
Other Reason	8	1	2	1	2	3	2
Total	100	100	100	100	100	100	100

TABLE 20: ESTIMATED PERCENTAGE OF RURAL LAND OWNERS BY SECOND REASON FOR OWNING THE SELECTED 20+ HECTARE PARCEL BY FOREST REGION (QUESTION 7)

(RURAL LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Reasons							
Land Investment	12	11	12	16	14	9	13
Farm/ Ranch	12	14	15	20	23	19	19
Timber to Sell	14	18	15	7	11	14	13
Timber Own Use	19	15	21	17	17	19	17
Principal Residence	15	23	12	21	16	14	17
2ND Residence	9	3	8	6	4	7	5
Rental Income	6	4	3	1	7	4	5
Personal Recreation	9	7	10	7	6	11	7
Inheritance	1	1	1	3	2	0	2
Other Reason	3	4	3	3	0	3	2
Total	100	100	100	100	100	100	100

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TABLES 21 THROUGH 37 REPRESENT DATA FROM THE PHASE I QUESTIONNAIRE FOR THOSE RESPONDENTS WHO OWN AT LEAST 20 HECTARES OF FOREST LAND (FOREST LAND OWNERS)

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TABLE 21: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY TOTAL HECTARES OF LAND OWNED BY FOREST REGION (QUESTION 1)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 49	38	15	22	8	3	12	11
50 - 99	33	19	31	24	16	36	22
100 - 199	18	24	22	16	16	20	18
200 - 399	6	17	12	23	31	19	23
400 +	6	26	13	30	34	12	26
Total	100	100	100	100	100	100	100
Average # Hectares Land by Region	134	506	195	533	671	213	501

TABLE 22: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY TOTAL HECTARES OF LAND OWNED BY FOREST REGION (QUESTION 1)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 49	12	2	6	1	0	4	2
50 - 99	18	4	13	5	3	14	5
100 - 199	17	9	14	5	6	16	8
200 - 399	11	13	16	13	16	23	15
400 +	43	73	51	76	75	44	71
Total	100	100	100	100	100	100	100

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TABLE 23: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY TOTAL HECTARES OF FOREST LAND HOLDINGS BY FOREST REGION (QUESTION 2)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 29	27	16	17	13	10	13	14
30 - 39	12	9	15	9	7	17	10
40 - 49	17	11	17	17	9	15	12
50 - 74	19	12	17	10	17	16	15
75 - 99	6	8	6	11	9	8	9
100 - 199	12	15	13	17	23	20	18
200 - 399	2	13	10	10	14	8	12
400 +	5	16	5	13	11	3	11
Total	100	100	100	100	100	100	100
Average # Hectares Forest Land Owned by Region	96	220	116	205	219	110	190

TABLE 24: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY TOTAL HECTARES OF FOREST LAND HOLDINGS BY FOREST REGION (QUESTION 2)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 29	7	2	4	2	1	3	2
30 - 39	4	1	4	1	1	5	2
40 - 49	8	2	6	4	2	6	3
50 - 74	12	3	9	3	5	9	5
75 - 99	5	3	4	5	3	6	4
100 - 199	16	9	16	11	15	23	13
200 - 399	4	14	22	13	17	17	16
400 +	43	65	35	62	57	31	56
Total	100	100	100	100	100	100	100

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TABLE 25: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY PERCENTAGE OF TOTAL LAND HOLDINGS THAT ARE FOREST LANDS BY FOREST REGION (QUESTION 2 / QUESTION 1)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
1 - 24	2	10	5	14	28	12	17
25 - 49	12	24	25	40	32	22	29
50 - 74	26	33	25	29	22	32	26
75 - 99	43	25	34	14	14	27	21
100 +	18	7	12	4	5	8	7
Total	100	100	100	100	100	100	100
Average % by Region	72%	43%	59%	38%	33%	52%	38%

TABLE 26: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY PERCENTAGE OF TOTAL LAND HOLDINGS THAT ARE FOREST LANDS BY FOREST REGION (QUESTION 2 / QUESTION 1)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
1 - 24	1	6	2	11	25	8	16
25 - 49	6	32	18	26	22	18	24
50 - 74	21	38	26	47	18	25	28
75 - 99	56	20	47	14	30	35	27
100 +	17	3	8	1	6	14	5
Total	100	100	100	100	100	100	100

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TABLE 27: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY NUMBER OF PARCELS OF FOREST LAND OWNED BY FOREST REGION (QUESTION 3)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
# Parcels							
1 Parcel	47	31	45	23	29	43	32
2 - 4 Parcels	40	38	36	40	48	46	43
5 - 9 Parcels	9	17	15	21	15	7	15
10 - 19 Parcels	2	9	2	11	8	3	7
20 + Parcels	3	5	2	6	0	1	3
Total	100	100	100	100	100	100	100
Average # Parcels by Region	3.1	5.5	3.1	6.7	3.6	3.1	4.3

TABLE 28: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY NUMBER OF PARCELS OF FOREST LAND OWNED BY FOREST REGION (QUESTION 3)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
# Parcels							
1 Parcel	22	7	19	4	11	16	10
2 - 4 Parcels	30	17	26	13	31	39	24
5 - 9 Parcels	11	21	30	19	23	13	21
10 - 19 Parcels	11	29	17	22	33	17	27
20 + Parcels	26	27	9	42	3	16	18
Total	100	100	100	100	100	100	100

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TABLE 29: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO STILL OWN THE RANDOMLY SELECTED 20+ HECTARE PROPERTY BY FOREST REGION (QUESTION 4)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Still Owner	99	99	98	98	98	99	98
No	1	1	2	2	2	1	2
Total	100	100	100	100	100	100	100

TABLE 30: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY SIZE OF SELECTED PARCEL BY FOREST REGION (SELECTED PARCEL)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 29	23	8	17	8	2	6	7
30 - 39	21	15	16	16	4	15	11
40 - 49	16	10	10	6	6	6	7
50 - 74	31	50	35	54	57	53	51
75 - 99	5	2	6	6	4	5	4
100 - 199	2	12	16	10	21	13	15
200 - 399	1	4	1	1	7	2	4
400 +	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100
Average # Hectares in Selected Parcel by Region	52	68	65	66	90	67	76

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TABLE 31: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY HECTARES OF FOREST LAND IN SELECTED PARCEL BY FOREST REGION (QUESTION 5)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0	1	4	2	3	9	3	5
1 - 9	4	3	6	7	9	5	6
10 - 19	4	6	7	22	10	9	10
20 - 29	37	25	23	23	20	18	23
30 - 39	16	25	17	12	12	19	16
40 - 49	20	9	18	16	9	22	13
50 - 74	16	23	17	12	16	17	17
75 - 99	1	2	4	2	3	4	3
100 - 199	2	3	5	4	9	2	6
200 - 399	0	1	0	0	2	2	1
400 +	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100
Average # Hectares Forest Land in Parcel by Region	38	41	42	34	45	39	41

TABLE 32: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY PERCENTAGE OF SELECTED LAND PARCEL THAT IS FOREST LAND BY FOREST REGION (QUESTION 5 / SELECTED PARCEL)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	1	4	2	3	9	3	5
1 - 24	2	5	6	14	18	9	12
25 - 49	7	17	17	30	24	17	22
50 - 74	21	27	24	29	21	33	25
75 - 99	41	26	33	17	16	25	22
100	27	21	17	8	12	13	15
Total	100	100	100	100	100	100	100
Average % by Region	73%	60%	65%	52%	50%	58%	54%

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TABLE 33: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO CUT WOOD PRODUCTS FROM THE RANDOMLY SELECTED 20+ HECTARE PROPERTY DURING THE LAST 10 YEARS BY FOREST REGION (QUESTION 4)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Cut Wood	70	71	66	69	44	64	58
No	30	29	34	31	56	36	42
Total	100	100	100	100	100	100	100

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TABLE 34: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY REASONS FOR OWNING THE SELECTED 20+ HECTARE PARCEL (QUESTION 7)

(FOREST LAND OWNERS : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Reasons			
Land Investment	7	13	14
Farm/Ranch Operation	56	17	5
Timber to Sell	4	16	17
Timber for Own Use	0	20	32
Principal Residence	19	14	5
2ND Residence	5	4	5
Rental Income	2	5	5
Personal Recreation	1	8	13
Inheritance	3	1	1
Other Reason	2	2	4
Total	100	100	100
Non Response	15%	40%	56%

TABLE 35: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY REASONS FOR OWNING THE SELECTED 20+ HECTARE PARCEL (QUESTION 7)

(FOREST LAND HOLDINGS : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Reasons			
Land Investment	6	10	15
Farm/Ranch Operation	71	12	1
Timber to Sell	6	25	17
Timber for Own Use	0	28	24
Principal Residence	9	12	26
2ND Residence	2	2	2
Rental Income	2	5	3
Personal Recreation	0	4	8
Inheritance	1	1	1
Other Reason	2	1	4
Total	100	100	100
Non Response	15%	41%	61%

APPENDIX 2 : PHASE I RESULTS TABLES

TABLE 36: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY PRINCIPAL REASON FOR OWNING THE SELECTED 20+ HECTARE PARCEL BY FOREST REGION (QUESTION 7)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Reasons							
Land Investment	20	11	12	3	5	6	7
Farm/ Ranch	19	57	33	66	65	40	56
Timber to Sell	14	3	9	1	4	4	4
Timber Own Use	0	0	1	0	0	0	0
Principal Residence	18	18	24	21	14	32	19
2ND Residence	10	4	8	4	4	9	5
Rental Income	2	0	1	1	3	0	2
Personal Recreation	4	1	2	1	1	3	1
Inheritance	6	3	7	1	2	4	3
Other Reason	8	2	2	1	2	3	2
Total	100	100	100	100	100	100	100

TABLE 37: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY SECOND REASON FOR OWNING THE SELECTED 20+ HECTARE PARCEL BY FOREST REGION (QUESTION 7)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Reasons							
Land Investment	14	9	10	16	15	9	13
Farm/ Ranch	10	17	15	20	18	18	17
Timber to Sell	19	23	18	7	15	18	16
Timber Own Use	20	17	20	18	21	22	20
Principal Residence	11	17	12	21	13	10	14
2ND Residence	9	1	7	6	2	7	4
Rental Income	6	3	2	1	9	3	5
Personal Recreation	7	8	12	7	7	9	8
Inheritance	1	1	1	1	0	0	1
Other Reason	3	4	2	3	0	3	2
Total	100	100	100	100	100	100	100

APPENDIX 3 : PHASE II : B.C. FOREST LAND OWNERS QUESTIONNAIRE

C.E. Wetton Associates Inc.
1473 FINLAYSON PLACE
VICTORIA, BRITISH COLUMBIA V8T 2V8
PHONE (604) 595-2202

February 1988

Dear Forest Land Owner:

Thank you for your cooperation and assistance in answering the BC Land Use Questionnaire. You are among a select group of respondents to the first Questionnaire who are being asked to participate in the follow-up Study of BC Forest Land Owners. We are again asking for your assistance and about 25 minutes of your time in answering the attached Questionnaire. The main purpose of the follow-up Study is to profile the background characteristics and forest management objectives of Private Forest Land Owners and to determine what potential subsidy or other assistance would be most beneficial.

The Study hopes to gain a better understanding of the role of Private Forest Land Owners in the future of our Province. We are therefore interested in the forest management activities you have carried out in the past, what your intentions and management objectives are for the future, and what benefits (financial, psychological, recreational or ecological) you receive from your Forest Land. This follow-up Study is NOT designed to determine land or timber supply characteristics and is NOT designed to persuade you to do something with your land or timber that is contrary to your personal objectives. Your objectives might be as simple as wanting to build a retirement home in a peaceful, natural forest or perhaps wanting to have a steady income generated from your Forest Land to cover a mortgage and taxes. We want to know what your forest management objectives are, and what obstacles, if any, prevent you from reaching these objectives.

This study is being conducted by the independent consulting firm C.E. Wetton Associates Inc., under contract to the Canadian Forestry Service, Government of Canada. This information will be used in developing informational, assistance and subsidy programs for Private Forest Land Owners. It is the policy of our firm to provide the overall picture of the topic being studied, but NEVER to release individual names and addresses or answers. Your individual answers to the attached Questionnaire will be held in strictest confidence.

I urge you to participate in this follow-up Study and ask that you complete the attached Questionnaire. If your answer to a question is not among the possible answers listed, please feel free to add your own answer category or any other written comments. A postage paid envelope is enclosed for your convenience. Your answers are very important to this Study.

Thank you for your time and assistance.

Yours truly,

C. E. Wetton

C.E. Wetton,
President

C.E. Wetton Associates Inc.
1473 FINLAYSON PLACE
VICTORIA, BRITISH COLUMBIA V8T 2V8
PHONE (604) 595–2202

March 1988

Dear Forest Land Owner:

You are among a select group of property owners who are being asked to participate in a follow–up study of B.C. Forest Land Owners. Your copy of the B.C. Forest Land Owners Questionnaire should have reached you during the first week of February 1988. In the event the earlier package did not reach you, or your copy of the Questionnaire was mislaid, a second copy of the Questionnaire is enclosed. Although your participation in the study is voluntary, **your answers are essential to providing a more complete understanding of the role of Private Forest Land Owners in the future of our province.**

If you have already returned your Questionnaire, please accept my thanks for your assistance and cooperation. If you have not yet completed the Questionnaire, I ask you to participate in this study by returning the completed Questionnaire in the enclosed postage paid envelope. Even if your forest land plays a minor role in the overall use of your property, we would like to hear your opinions and answers to the attached Questionnaire.

The Study hopes to gain a better understanding of the goals of Private Forest Land Owners in British Columbia. We are therefore interested in the forest management activities you have carried out in the past, what your intentions and management objectives are for the future, and what benefits (financial, psychological, recreational or ecological) you receive from your Forest Land. **The information from this study will be used in developing informational, assistance and subsidy programs for Private Forest Land Owners.**

This study is being conducted by the independent consulting firm C.E. Wetton Associates Inc. under contract to the Canadian Forestry Service, Government of Canada. Your individual answers to the attached Questionnaire will be handled in a **strictly confidential** manner by this firm.

I urge you to participate in this follow–up Study and ask that you complete the attached Questionnaire. A postage paid return envelope is enclosed for your convenience. Your answers are very important to this Study.

Thank you for your time and assistance.

Yours truly,

C.E Wetton

C.E. Wetton,
President

BRITISH COLUMBIA FOREST LAND OWNERS SURVEY
February 1988

Your answers to this Questionnaire will be kept **STRICTLY CONFIDENTIAL.**

If more than one person is listed as the legal owner of your FOREST land, the person who is most familiar with the property and its management objectives should answer the Questionnaire.

Thank you for your cooperation and assistance in this Study of Forest Land Owners. Please return your completed Questionnaire in the enclosed postage paid envelope.

REGION 1 Vancouver Forest Region - Includes all of the Lower Mainland (ie. Vancouver, New Westminster, Surrey, White Rock, Port Moody, Chilliwack, etc.), Vancouver Island, Queen Charlotte Islands, and all the coastal areas south of Kitimat.

REGION 2 Kamloops Forest Region - Includes Ashcroft, Blue River, Cache Creek, Enderby, Kamloops, Kelowna, Lillooet, Logan Lake, Lytton, Merritt, Oliver, Osoyoos, Penticton, Princeton, Salmon Arm, Vernon.

REGION 3 Nelson Forest Region - Includes Castlegar, Cranbrook, Creston, Fernie, Golden, Grand Forks, Greenwood, Kimberley, Nakusp, Nelson, Revelstoke, Rogers Pass, Rossland.

REGION 4 Cariboo Forest Region - Includes 70 Mile House, 100 Mile House, 150 Mile House, Anahim Lake, Big Bar Creek, Clinton, Eagle Creek, Horsefly, Lac La Hache, Quesnel, Tatla Lake, Williams Lake.

REGION 5 Prince George Region - Includes Crescent Spar, Dawson Creek, Endako, Fort Nelson, Fort St James, Fort St John, Hixon, Hudson's Hope, Mackenzie, McBride, Muncho Lake, Prince George, Strathnaver, Valemount.

REGION 6 Prince Rupert Region - Includes Alice Arm, Burns Lake, Cassiar, Dease Lake, Hazelton, Houston, Kemano, Kitimat, Prince Rupert, Smithers, Stewart, Terrace.

BRITISH COLUMBIA FOREST LAND OWNERS SURVEY
February 1988

BACKGROUND QUESTIONS

1. How many acres of FOREST land do you own in the province of British Columbia?

   _____ Acres

   (FOREST land includes land that has deciduous or coniferous trees growing on it, cutover land, replanted forest land, or scrub/wild land that has the potential to became productive forest lands.)

2. Approximately how many acres of your FOREST land is located in each of the Forest Regions shown on the map on the front cover.

FOREST REGION	# ACRES
1. Vancouver:	_____ Acres
2. Kamloops:	_____ Acres
3. Nelson:	_____ Acres
4. Cariboo:	_____ Acres
5. Prince George:	_____ Acres
6. Prince Rupert:	_____ Acres

3. When did you obtain the MAJOR PORTION of the FOREST land you now own in British Columbia? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

   ☐ Before 1930
   ☐ 1930 - 1939
   ☐ 1940 - 1949
   ☐ 1950 - 1959
   ☐ 1960 - 1969
   ☐ 1970 - 1979
   ☐ 1980 or later

4. Has any of the FOREST land you now own in British Columbia been owned by a previous generation of your family? (eg. parents, grandparents, uncle, aunt)

   ☐ Yes
   ☐ No

5. In which Forest Region do you live? (Please check the map on the front cover of the Questionnaire.)

   ☐ 1. Vancouver Forest Region
   ☐ 2. Kamloops Forest Region
   ☐ 3. Nelson Forest Region
   ☐ 4. Cariboo Forest Region
   ☐ 5. Prince George Forest Region
   ☐ 6. Prince Rupert Forest Region
   ☐ Canadian resident, but not a resident of British Columbia
   ☐ Resident of another country

6. Would you be interested in being a member of a Woodland Owners' Association which could lead you to better forest management information, forest product markets, etc. ?

   ☐ Yes, I am already a member
   ☐ Yes, I would like to but I don't know of any Association in my area.
   ☐ No

BRITISH COLUMBIA FOREST LAND OWNERS SURVEY
February 1988

CURRENT FORESTRY PRACTICES

7. Which of the following forest management activities have you undertaken on your FOREST lands during the LAST 10 YEARS? (CHECK ALL THAT APPLY)

- ☐ Prepared a Forest Inventory
- ☐ Prepared a Forest Management Plan
- ☐ Site preparation for planting or natural reseeding
- ☐ Tree planting
- ☐ Tree thinning or spacing of young stands
- ☐ Fertilizing
- ☐ Developed access roads, trails
- ☐ Fire protection measures (fire breaks, ponds, pumps, etc.)
- ☐ Improvement harvest (removing low quality trees, blowdowns, etc.)
- ☐ Harvested timber, logs, poles, firewood, etc. TO SELL
- ☐ Harvested timber, logs, poles, firewood, etc. FOR OWN USE
- ☐ Control of vegetation (herbicide, alder control, etc.)
- ☐ Insect/disease control measures
- ☐ Boundary line (fencing or survey)
- ☐ Other (please specify)

_____

_____

- ☐ None of the above activities during the last 10 years

8. Do you have reasonable access to and on your FOREST lands to carry out forest management activities?

- ☐ Yes, the major portion of my FOREST lands are accessible.
- ☐ Yes and No. Some of my FOREST areas have reasonable access while others have no access.
- ☐ No. The major portion of my FOREST land has unacceptable access.
- ☐ Don't know

9. During the last 10 years, who did MOST of the harvesting and/or other forest management activities on your FOREST land? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

- ☐ Myself and/or members of my family
- ☐ Myself with hired help
- ☐ A hired crew
- ☐ A logging contractor
- ☐ Other (please specify)

_____

_____

- ☐ Not applicable, no forestry activities in last 10 years

10. During the last 10 years, on what portion of your FOREST land has harvesting of timber or other wood products (eg. firewood, fenceposts) taken place?

_____% or_____ ACRES

11. During the last 10 years, what method was normally used to harvest timber or other wood products (eg. firewood, fenceposts) from your FOREST lands? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

- ☐ Selection (only preselected marked trees were removed)
- ☐ Diameter limit (only trees over a minimum diameter were removed)
- ☐ Clearcutting (most or all of the trees on a given area were removed)
- ☐ Land clearing (trees were harvested to clear the land for a use other than forestry purposes)
- ☐ Don't know method used
- ☐ Other (please specify)

_____

_____

- ☐ Not applicable, no harvesting

12. If a logging contractor or company was hired to carry out the harvesting, were you satisfied with their logging methods and any payment you received?

- ☐ Yes, I was mainly satisfied
- ☐ No, I was not entirely satified but it is possible that I will use their services again
- ☐ No, I was not satisfied
  PLEASE EXPLAIN

_____

_____

- ☐ Not applicable, no harvesting

13. During the last 10 years, which wood products have you SOLD from your FOREST lands? (CHECK ALL THAT APPLY)

- ☐ Sawlogs
- ☐ Fenceposts, poles or pilings
- ☐ Railroad ties
- ☐ Christmas trees
- ☐ Firewood
- ☐ Pulpwood
- ☐ Don't know what the cut timber was used for
- ☐ Other (please specify)

_____

_____

- ☐ Not applicable, no sales

14. During the last 10 years, how were MOST of your wood products SOLD? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

- ☐ Sales of standing timber
- ☐ Roadside sales of logs
- ☐ Roadside sales of other wood products (eg. firewood, fenceposts)
- ☐ Logs delivered to buyer
- ☐ Other wood products delivered to buyer
- ☐ Other

_____

_____

- ☐ Not applicable, no sales

15. If you have NOT SOLD any wood products from your FOREST land in the last 10 years, what are your main reasons for not having done so? (Please rank in order of importance up to 3 reasons that apply. 1=Most Important Reason; 2=2ND Most Important Reason; 3=3RD Most Important Reason)

_____ I only cut wood for my own use

_____ I do not want my trees cut

_____ Trees are not large enough to cut for any purpose

_____ There were accessibility or road problems

_____ I do not know what products to sell or how to find a buyer

_____ Prices are too low

_____ I can't find a buyer

_____ I do not have enough wood and/or the trees are of low quality so it is not worthwhile

_____ I cannot do the work myself, and am unable to find reliable workers

_____ I am too busy with other activities

_____ Extra income could decrease or make me lose my old age pension supplement

Other (please specify)

_____

_____

☐ Not applicable, I have sold some wood in the last 10 years

FUTURE OBJECTIVES

16. Which of the following forest management activities do you expect to carry out on your FOREST lands during the NEXT 10 YEARS? (CHECK ALL THAT APPLY)

☐ Preparation of a Forest Inventory

☐ Preparation or renewal of a Forest Management Plan

☐ Site preparation for planting or natural reseeding

☐ Tree planting

☐ Tree thinning or spacing of young stands

☐ Fertilizing

☐ Developing access roads, trails

☐ Fire protection measures (fire breaks, ponds, pumps, etc.)

☐ Improvement harvest (removing low quality trees, blowdowns, etc.)

☐ Harvesting timber, logs, poles, firewood, etc. TO SELL

☐ Harvesting timber, logs, poles, firewood, etc. FOR OWN USE

☐ Control of vegetation (herbicide, alder control, etc.)

☐ Insect/disease control measures

☐ Boundary (fencing or survey)

☐ Other (please specify)

_____

_____

☐ None of the above activities during the next 10 years

BRITISH COLUMBIA FOREST LAND OWNERS SURVEY
February 1988

17. Do you expect to sell any timber or wood products from your FOREST lands in the NEXT 10 YEARS? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

- ☐ Yes
- ☐ No, I only cut wood for my own use
- ☐ No, I don't want my trees cut
- ☐ No, I want to keep my trees for financial emergencies
- ☐ No, there will be nothing on my land to cut for the next 10 years
- ☐ No, I don't know what to sell or how to go about it
- ☐ Maybe, if I can find someone to do the work
- ☐ Other (please specify)

_____

_____

18. Do you expect to harvest any timber or wood products from your FOREST land for YOUR OWN USE in the next 10 years?

- ☐ Yes
- ☐ No
- ☐ Don't know or uncertain

19. Would you seriously consider buying or leasing additional land for FORESTRY purposes, if the price was reasonable?

- ☐ Yes
- ☐ No

20. Would you seriously consider having some of your cutover or scrub land planted with forest trees?

- ☐ Yes, About _____ Acres
- ☐ No
- ☐ Not applicable

21. Would you like to clear some or all of your FOREST lands for some other use? (Eg. pasture, hayfield, housing development)

- ☐ Yes, About _____ Acres
- ☐ No

22. Which of the following do you feel will be the MOST IMPORTANT BENEFIT you expect to derive from your FOREST land in the NEXT 10 YEARS? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

- ☐ Increase in land value (investment / development)
- ☐ Income from sale of timber
- ☐ Farm, ranch or domestic use
- ☐ Recreation (hunting, camping, fishing, etc)
- ☐ Aesthetic enjoyment (just to enjoy trees, observe nature and wildlife, and the general satisfaction of owning "green space")
- ☐ Other (please specify)

_____

_____

BRITISH COLUMBIA FOREST LAND OWNERS SURVEY
February 1988

OWNER STATISTICS

23. In what year were you born?

_____ Year

24. What is your gender?

- ☐ Male
- ☐ Female

25. What is your MAIN occupation? (PLEASE CHECK ONLY ONE ANSWER, YOUR BEST ANSWER)

- ☐ Farmer, Rancher
- ☐ Fisherman
- ☐ Woodsworker
- ☐ Labourer - Wage Earner
- ☐ Office worker (clerk, secretary, bookkeeper, etc.)
- ☐ Manager or Director
- ☐ Trades worker (eg. welder, plumber, electrician, etc.)
- ☐ Business or commercial (eg. sales person, storekeeper, wholesaler, etc.)
- ☐ Professional (eg. doctor, nurse, engineer, teacher, etc.)
- ☐ Homemaker or housekeeper
- ☐ Retired
- ☐ Other (please specify)

_____

_____

26. How much formal schooling have you had? (CHECK THE HIGHEST LEVEL ACHIEVED)

- ☐ Seven years school or less
- ☐ Some high school
- ☐ Completed high school or equivalent
- ☐ Some trade, technical, vocational, community college or university training
- ☐ Trades certificate or diploma (eg. Apprentice, Journeyman)
- ☐ Technical, vocational or community college diploma or certificate
- ☐ University degree (Eg. Bachelor or Masters)
- ☐ Other (Please specify)

_____

_____

27. Have you had any forestry or logging instruction? (CHECK ALL THAT APPLY)

- ☐ Youth groups (Scouts, 4H, etc.) or High School Forestry Classes
- ☐ Vocational Training
- ☐ Community College or Ranger School (Technician / Technologist)
- ☐ University
- ☐ Years of experience in forestry
- ☐ Other (please specify)

_____

_____

- ☐ None of the above

BRITISH COLUMBIA FOREST LAND OWNERS SURVEY
February 1988

28. What percentage of your last year's gross annual income was derived from your FOREST lands?

- ☐ 0%
- ☐ 1 - 10%
- ☐ 11 - 25%
- ☐ 26 - 50%
- ☐ 51 - 75%
- ☐ 76 - 100%

29. Which of the following categories would represent your gross annual income from all sources?

- ☐ Under $10,000
- ☐ $10,000 - $24,999
- ☐ $25,000 - $39,999
- ☐ $40,000 - $54,999
- ☐ $55,000 or more

30. Are you familiar with either the provincial government Woodlot License Program or the federal government Private Forest Lands Program? (CHECK ONE)

- ☐ Yes, I am familiar with both programs
- ☐ Yes, I know about the Woodlot License Program
- ☐ Yes, I know about the Private Forest Lands Program
- ☐ No, I'm not familiar with either program
- ☐ Don't know or not certain

31. Any comments you might have concerning your situation as a private FOREST land owner or the MAJOR BARRIERS you face in managing your FOREST lands would be greatly appreciated.

What is the best way to distribute information to you as a private FOREST land owner? (TV adverstising, Newsletters, Radio, Local and Provincial Newspapers, Local Area Meetings, Direct Mail, etc.)

_____

_____

_____

_____

_____

_____

_____

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_____

_____

Thank you for your time and assistance.
Please return the Questionnaire in the enclosed postage paid envelope.

APPENDIX 4 : PHASE II RESULTS TABLES

August 1988

APPENDIX 4 : PHASE II RESULTS TABLES

The following technical notes apply to the results tables found in this appendix.

* In all tables, except where noted otherwise, the percentages may not sum to 100% due to rounding.

* In some questions the respondent was asked to select as many answers as applied. In these multiple response questions the percentages will not sum to 100% since the respondents may have selected several categories. A comment concerning the total percentage appears at the bottom of each multiple response table.

* The definition of Forest Land Owner refers to owners of at least 20 hectares of forest land. The forest land is not restricted to rural areas or to residential or farm property classifications. The Forest Land Owner must also own at least one rural farm or rural residential property (of at least 20 hectares in size) to have qualified for the initial selection.

* Results have been weighted so that a provincial representation is achieved. Two major types of weighting have been used. The first weighting scheme weights by the number of forest land owners who are estimated to correspond to each of the relevant categories. The second weighting scheme, weights by the total hectares of forest land estimated to apply to each category.

* In several questions the answer category of Multiple Selection has been included to allow for those respondents who selected more than one answer in a single response question. This is particularly true in the method of harvesting (Question #11) and method of selling (Question #14) questions.

APPENDIX 4 : PHASE II RESULTS TABLES

TABLE 1 : ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY SIZE OF FOREST LAND HOLDINGS IN HECTARES BY FOREST REGION (QUESTION 2)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
20 - 49	68	21	53	28	15	19	26
50 - 99	17	25	16	29	20	45	24
100 - 199	13	14	11	18	30	22	21
200 - 399	0	18	14	11	24	8	17
400 +	3	22	7	14	11	6	12
Total	100	100	100	100	100	100	100
Average # Hectares Forest Land Owned by Region	79	286	132	162	236	122	202

APPENDIX 4 : PHASE II RESULTS TABLES

TABLE 2 : ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO ACQUIRED FOREST LAND BY ACQUISITION DATE BY FOREST REGION (QUESTION 3)

(FOREST LAND OWNERS : IN PERCENT)

Date	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Before 1930	1	0	3	0	0	2	1
1930 - 39	5	4	0	1	0	0	1
1940 - 49	8	14	3	4	1	2	5
1950 - 59	17	19	20	7	16	19	16
1960 - 69	10	14	28	28	31	12	25
1970 - 79	39	28	26	30	22	37	27
1980 +	20	22	19	30	29	27	26
Total	100	100	100	100	100	100	100

TABLE 3 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS ACQUIRED BY ACQUISITION DATE BY FOREST REGION (QUESTION 3)

(FOREST LAND HOLDINGS : IN PERCENT)

Date	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Before 1930	2	0	4	0	0	2	0
1930 - 39	3	2	0	1	0	0	1
1940 - 49	4	6	3	17	0	10	5
1950 - 59	15	22	24	9	8	25	13
1960 - 69	5	9	37	34	36	8	27
1970 - 79	32	30	15	19	17	27	21
1980 +	39	32	18	20	40	29	33
Total	100	100	100	100	100	100	100

APPENDIX 4 : PHASE II RESULTS TABLES

TABLE 4 : ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WITH PREVIOUS GENERATION OF FAMILY OWNERSHIP BY FOREST REGION (QUESTION 4)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, In Family	31	30	29	30	9	31	21
Not In Family	69	70	71	70	91	69	79
Total	100	100	100	100	100	100	100

TABLE 5 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS WITH PREVIOUS GENERATION OF FAMILY OWNERSHIP BY FOREST REGION (QUESTION 4)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, In Family	22	20	37	40	3	32	16
Not In Family	78	80	63	60	97	68	84
Total	100	100	100	100	100	100	100

APPENDIX 4 : PHASE II RESULTS TABLES

TABLE 6 : ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY REGION OF RESIDENCE BY FOREST REGION OF LAND HOLDINGS (QUESTION 5)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Region Residence							
Vancouver	80	2	6	3	9	8	11
Kamloops	0	96	9	2	0	3	18
Nelson	0	0	76	0	0	0	7
Cariboo	3	0	0	89	0	0	15
P. George	0	0	0	4	88	0	38
P. Rupert	0	0	0	0	0	75	6
Canadian	6	0	0	0	2	2	1
Foreign	11	2	9	2	1	12	4
Total	100	100	100	100	100	100	100

TABLE 7 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY REGION OF OWNER RESIDENCE BY FOREST REGION OF LAND HOLDINGS (QUESTION 5)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Region Residence							
Vancouver	87	0	3	1	5	6	6
Kamloops	0	100	6	2	0	1	25
Nelson	0	0	86	0	0	0	5
Cariboo	1	0	0	94	0	0	13
P. George	0	0	0	2	94	0	46
P. Rupert	0	0	0	0	0	85	4
Canadian	4	0	0	0	1	1	1
Foreign	9	0	6	1	0	7	1
Total	100	100	100	100	100	100	100

APPENDIX 4 : PHASE II RESULTS TABLES

TABLE 8 : ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO ARE MEMBERS OR WANT TO BE MEMBERS OF A FOREST LAND OWNER ASSOCIATION BY FOREST REGION (QUESTION 6)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Member	1	0	7	0	3	0	2
Yes, Want to be	67	72	35	67	50	53	57
No	32	28	58	33	47	47	41
Total	100	100	100	100	100	100	100

TABLE 9 : ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS WITH OWNERS WHO ARE MEMBERS OR WANT TO BE MEMBERS OF A FOREST LAND OWNER ASSOCIATION BY FOREST REGION (QUESTION 6)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Member	1	0	11	0	1	0	1
Yes, Want to be	43	67	23	57	75	60	66
No	56	33	66	43	24	40	33
Total	100	100	100	100	100	100	100

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TABLE 10: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY FORESTRY PRACTICES CARRIED OUT DURING LAST 10 YEARS BY FOREST REGION (QUESTION 7)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Forest Inventory	11	2	2	0	1	8	2
Forest Mgt. Plan	5	5	5	7	2	11	4
Site Preparation	5	2	19	4	2	8	5
Tree Planting	15	1	11	1	3	2	4
Tree Spacing	21	30	27	16	11	10	17
Fertilizing	3	0	7	0	3	2	2
Access Road, Trails	32	24	24	47	20	48	29
Fire Protection	17	6	18	3	8	12	9
Improvement Harvest	29	41	25	30	10	44	24
Harvested : Sold	36	55	40	52	32	44	42
Harvested : Own Use	62	65	54	74	56	60	61
Vegetation Control	8	4	5	14	3	0	5
Insect Control	0	12	9	7	0	8	5
Boundary Line	25	39	34	58	35	48	40
Other Forestry Work	1	0	9	8	2	5	3
No Forestry Work	18	13	18	5	23	12	17

Note: The percentages do not add to 100, since a forest land owner may have carried out more than one forestry activity.

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TABLE 11: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY FORESTRY PRACTICES CARRIED OUT DURING LAST 10 YEARS BY FOREST REGION (QUESTION 7)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Forest Inventory	12	1	19	0	0	7	2
Forest Mgt. Plan	3	22	6	13	1	18	9
Site Preparation	2	2	35	3	1	10	4
Tree Planting	8	0	8	0	1	1	1
Tree Spacing	14	42	28	11	11	18	20
Fertilizing	1	0	4	0	2	2	1
Access Road, Trails	22	38	39	46	42	50	41
Fire Protection	14	9	18	4	4	14	7
Improvement Harvest	16	27	32	30	9	37	19
Harvested : Sold	51	79	45	58	56	48	61
Harvested : Own Use	70	47	59	81	42	55	51
Vegetation Control	5	9	8	20	0	0	6
Insect Control	0	15	34	11	0	10	8
Boundary Line	20	40	54	48	32	52	38
Other Forestry Work	1	0	12	9	1	3	2
No Forestry Work	14	8	10	2	8	5	7

Note: The percentages do not add to 100, since a forest land owner may have carried out more than one forestry activity.

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TABLE 12: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO HAVE REASONABLE ACCESS TO AND ON THEIR FOREST LANDS BY FOREST REGION (QUESTION 8)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Good Access	70	85	81	88	75	78	80
Some Good/Some Poor	21	9	18	12	19	9	15
Poor Access	10	5	2	0	5	13	5
Total	100	100	100	100	100	100	100

TABLE 13: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS WITH REASONABLE ACCESS TO AND ON THE FOREST LANDS BY FOREST REGION (QUESTION 8)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Good Access	55	97	87	70	84	89	85
Some Good/Some Poor	36	2	12	30	14	4	13
Poor Access	9	1	1	0	2	7	2
Total	100	100	100	100	100	100	100

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TABLE 14: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY PERSONS RESPONSIBLE FOR FOREST MANAGEMENT PROJECTS BY FOREST REGION (QUESTION 9)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Owner & Family	37	35	42	35	43	48	40
Owner & Crew	19	9	9	19	4	10	10
Hired Crew	0	1	2	5	3	0	2
Contractor	17	29	14	31	23	23	24
Other	0	5	5	2	0	0	2
Multiple of Above	5	8	10	4	3	7	5
No one, N.A.	21	14	18	5	24	12	17
Total	100	100	100	100	100	100	100

TABLE 15: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY PERSONS RESPONSIBLE FOR FOREST MANAGEMENT PROJECTS BY FOREST REGION (QUESTION 9)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Owner & Family	26	22	19	25	26	43	25
Owner & Crew	15	4	9	29	3	21	8
Hired Crew	0	1	1	2	1	0	1
Contractor	37	28	13	40	55	25	41
Other	0	21	28	0	0	0	7
Multiple of Above	3	17	20	2	8	5	10
No one, N.A.	20	8	10	2	8	6	7
Total	100	100	100	100	100	100	100

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TABLE 16: ESTIMATED PERCENTAGE OF FOREST LANDS THAT HAVE HAD HARVESTING ACTIVITIES IN THE LAST 10 YEARS BY FOREST REGION BY AMOUNT OF FOREST LAND HARVESTED IN HECTARES (QUESTION 10)

(FOREST LANDS HARVESTED : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0	27	18	30	14	36	24	27
1 - 4	27	9	20	17	12	23	15
5 - 9	15	10	3	2	8	19	8
10 - 19	10	2	9	13	4	13	7
20 - 29	7	10	9	21	7	0	9
30 - 49	8	20	11	17	4	6	10
50 - 99	6	12	7	4	7	14	8
100 +	1	20	11	12	23	2	16
Total	100	100	100	100	100	100	100

TABLE 17: ESTIMATED PERCENTAGE OF FOREST LANDS THAT HAVE HAD HARVESTING ACTIVITIES IN THE LAST 10 YEARS BY FOREST REGION BY PERCENTAGE OF FOREST LAND HARVESTED (QUESTION 10)

(FOREST LANDS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	24	13	30	12	32	17	24
1 - 24	49	46	33	34	40	58	41
25 - 49	8	15	9	18	8	6	11
50 - 74	9	22	18	26	13	11	17
75 - 99	1	4	7	5	5	7	5
100	10	0	3	4	3	2	3
Total	100	100	100	100	100	100	100

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TABLE 18: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY METHOD OF HARVESTING BY FOREST REGION (QUESTION 11)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Selection	32	12	19	12	9	13	13
Diameter Limit	10	42	17	25	5	12	17
Clearcut	4	5	2	13	14	16	10
Land Clearing	18	5	8	20	22	21	17
Other	4	6	9	11	5	12	7
Multiple of Above	7	16	14	7	11	12	11
Don't Know Method	1	1	4	1	6	2	3
No Harvest, N.A.	24	13	28	10	29	13	21
Total	100	100	100	100	100	100	100

TABLE 19: ESTIMATED PERCENTAGE OF FOREST LANDS HARVESTED BY METHOD OF HARVESTING BY FOREST REGION (QUESTION 11)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Selection	25	8	11	8	3	9	6
Diameter Limit	4	53	32	24	3	9	20
Clearcut	3	22	4	5	29	28	22
Land Clearing	38	3	10	21	22	34	18
Other	2	1	8	23	2	7	5
Multiple of Above	4	5	11	12	11	6	9
Don't Know Method	0	0	2	0	17	0	9
No Harvest, N.A.	24	8	22	6	14	7	12
Total	100	100	100	100	100	100	100

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TABLE 20: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO WERE SATISFIED WITH WORK DONE BY CONTRACTORS BY FOREST REGION (QUESTION 12)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Satisfactory	30	18	20	31	20	25	22
Partly Satisfied	3	16	7	1	6	7	7
Not Satisfactory	4	17	5	4	12	0	9
Not Applicable	63	49	67	64	63	68	62
Total	100	100	100	100	100	100	100

TABLE 21: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS WHICH WERE SATISFIED WITH WORK DONE BY CONTRACTORS BY FOREST REGION (QUESTION 12)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Satisfactory	49	25	46	34	25	38	29
Partly Satisfied	1	12	7	1	11	6	9
Not Satisfactory	3	38	6	9	30	0	25
Not Applicable	48	26	41	57	34	56	38
Total	100	100	100	100	100	100	100

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TABLE 22: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY WOOD PRODUCTS SOLD BY FOREST REGION (QUESTION 13)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Sawlogs	46	58	37	52	37	49	45
Fenceposts, Poles	17	14	17	3	7	11	9
Railroad Ties	0	2	4	3	3	12	3
Xmas Trees	3	16	20	3	0	5	6
Firewood	17	29	13	4	2	13	10
Pulpwood	19	5	2	3	3	7	5
Don't Know Product	1	5	2	4	1	2	2
Other Products	1	2	2	1	3	7	2
No Sales, N.A.	50	29	48	40	62	45	49

Note: The percentages do not add to 100, since a forest land owner may sell more than one wood product.

TABLE 23: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY WOOD PRODUCTS SOLD BY FOREST REGION (QUESTION 13)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Sawlogs	57	83	41	57	67	64	67
Fenceposts, Poles	39	9	18	1	10	8	10
Railroad Ties	0	2	2	2	7	11	5
Xmas Trees	2	24	22	9	0	3	9
Firewood	12	16	8	5	1	10	6
Pulpwood	14	1	3	4	24	16	14
Don't Know Product	1	3	1	1	0	2	1
Other Products	0	1	4	2	2	5	2
No Sales, N.A.	39	11	46	40	33	29	29

Note: The percentages do not add to 100, since a forest land owner may sell more than one wood product.

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TABLE 24: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY METHOD OF SELLING WOOD PRODUCTS BY FOREST REGION (QUESTION 14)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Standing Timber	7	33	9	10	9	13	13
Roadside Sales	2	1	5	0	0	0	1
Logs Delivered	35	30	14	43	25	31	29
Other Wood Delivr'd	0	1	4	3	3	2	2
Other Sales Method	0	4	4	0	0	2	1
Multiple Selection	6	1	15	3	2	7	4
No Sales, N.A.	51	31	50	40	62	46	50
Total	100	100	100	100	100	100	100

TABLE 25: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY METHOD OF SELLING WOOD PRODUCTS BY FOREST REGION (QUESTION 14)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Standing Timber	31	49	13	15	5	8	18
Roadside Sales	3	0	1	0	0	0	0
Logs Delivered	25	34	13	40	53	52	43
Other Wood Delivr'd	0	0	4	2	7	2	4
Other Sales Method	0	4	2	0	0	2	1
Multiple Selection	2	1	21	4	2	6	4
No Sales, N.A.	40	11	46	40	33	30	30
Total	100	100	100	100	100	100	100

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TABLE 26: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WITH NO WOOD SALES BY REASONS FOR NOT SELLING ANY WOOD PRODUCTS DURING LAST 10 YEARS (QUESTION 15)

(FOREST LAND OWNERS WITH NO SALES : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Only cut wood for own use	35	6	20
Don't want trees cut	17	23	4
Trees not large enough to cut	4	16	3
Access or road problems	2	4	8
Don't know what or how to sell	1	13	3
Prices are too low	10	4	17
Can't find a buyer	0	8	0
Not enough wood / low quality wood	11	4	20
Can't do the work myself / no helpers	1	5	1
Too busy with other activities	10	14	15
Extra income decrease old age pension	1	1	3
Other Reason	8	1	5
Total	100	100	100

TABLE 27: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS WITH NO SALES BY REASONS FOR NOT SELLING ANY WOOD PRODUCTS DURING LAST 10 YEARS (QUESTION 15)

(FOREST LAND HOLDINGS WITH NO SALES : IN PERCENT)

	Main Reason	2ND Reason	3RD Reason
Only cut wood for own use	33	10	31
Don't want trees cut	14	19	2
Trees not large enough to cut	3	10	11
Access or road problems	1	3	2
Don't know what or how to sell	1	17	3
Prices are too low	15	2	12
Can't find a buyer	0	13	0
Not enough wood / low quality wood	10	3	28
Can't do the work myself / no helpers	0	4	1
Too busy with other activities	12	19	7
Extra income decrease old age pension	1	0	2
Other Reason	11	0	2
Total	100	100	100

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TABLE 28: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY FORESTRY PRACTICES PLANNED FOR NEXT 10 YEARS BY FOREST REGION (QUESTION 16)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Forest Inventory	16	8	15	16	13	8	13
Forest Mgt. Plan	17	12	12	15	12	9	13
Site Preparation	28	15	18	19	13	12	16
Tree Planting	31	12	19	16	14	14	15
Tree Spacing	32	45	34	37	14	39	28
Fertilizing	4	1	7	0	0	3	1
Access Road, Trails	19	19	11	15	8	32	14
Fire Protection	19	9	12	9	5	4	8
Improvement Harvest	35	58	38	45	28	46	39
Harvest : Sell	49	46	36	46	40	38	42
Harvest : Own Use	63	48	42	71	63	55	59
Vegetation Control	15	4	3	17	4	7	7
Insect Control	6	17	14	15	3	10	9
Boundary Line	26	20	14	29	21	32	23
Other Forestry Work	7	0	14	1	0	6	2
No Forestry Work	11	9	18	3	10	14	10

Note: The percentages do not add to 100, since a forest land owner may plan several forestry activities.

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TABLE 29: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY FORESTRY PRACTICES PLANNED FOR NEXT 10 YEARS BY FOREST REGION (QUESTION 16)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Forest Inventory	10	30	31	11	35	18	29
Forest Mgt. Plan	10	32	15	11	34	9	27
Site Preparation	45	34	34	20	15	12	22
Tree Planting	22	26	11	21	14	11	18
Tree Spacing	23	61	28	37	11	50	30
Fertilizing	3	0	4	0	0	2	0
Access Road, Trails	16	16	8	16	5	30	11
Fire Protection	13	11	14	7	3	4	6
Improvement Harvest	22	52	33	34	19	48	31
Harvest : Sell	64	39	40	40	65	31	52
Harvest : Own Use	67	18	52	81	50	44	47
Vegetation Control	10	9	7	22	1	4	6
Insect Control	4	19	33	18	2	9	10
Boundary Line	21	37	33	25	19	28	25
Other Forestry Work	4	0	35	0	0	5	3
No Forestry Work	11	2	9	1	4	11	4

Note: The percentages do not add to 100, since a forest land owner may plan several forestry activities.

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TABLE 30: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY REASON FOR NOT SELLING WOOD PRODUCTS IN THE NEXT 10 YEARS BY FOREST REGION (QUESTION 17)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Expect Sales	47	57	44	49	37	43	44
No, Own Use Only	20	16	15	26	29	23	24
Won't Cut Trees	6	3	13	8	4	5	6
Keep Trees Financial Emergencies	1	4	2	4	4	8	4
No Trees to Cut	6	5	7	10	9	10	8
Don't Know What or How to Sell	6	1	0	0	2	2	2
Maybe Sell Wood	9	8	5	3	3	3	4
Other Reason	6	6	13	1	11	6	8
Total	100	100	100	100	100	100	100

TABLE 31: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY REASON FOR NOT SELLING WOOD PRODUCTS IN THE NEXT 10 YEARS BY FOREST REGION (QUESTION 17)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Expect Sales	63	50	44	48	64	38	56
No, Own Use Only	13	4	23	31	15	14	14
Won't Cut Trees	4	1	12	2	1	3	2
Keep Trees Financial Emergencies	1	4	6	2	2	7	3
No Trees to Cut	5	16	7	14	12	16	13
Don't Know What or How to Sell	4	0	0	0	1	1	0
Maybe Sell Wood	5	3	2	2	1	5	2
Other Reason	5	22	5	1	4	16	9
Total	100	100	100	100	100	100	100

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TABLE 32: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO EXPECT TO HARVEST SOME TIMBER FOR THEIR OWN USE IN THE NEXT 10 YEARS BY FOREST REGION (QUESTION 18)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes	70	65	49	66	60	67	62
No	20	16	34	15	21	20	20
Uncertain	10	18	17	19	20	13	18
Total	100	100	100	100	100	100	100

TABLE 33: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS EXPECTED TO HARVEST SOME TIMBER FOR THEIR OWN USE IN THE NEXT 10 YEARS BY FOREST REGION (QUESTION 18)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes	75	74	45	78	47	69	60
No	19	13	29	12	22	12	18
Uncertain	5	13	26	10	31	19	22
Total	100	100	100	100	100	100	100

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TABLE 34: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO WOULD BUY ADDITIONAL LAND FOR FORESTRY PURPOSES BY FOREST REGION (QUESTION 19)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Buy More	32	68	47	69	49	47	54
No	68	32	53	31	51	53	46
Total	100	100	100	100	100	100	100

TABLE 35: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS WHICH WOULD BUY ADDITIONAL LAND FOR FORESTRY PURPOSES BY FOREST REGION (QUESTION 19)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Buy More	25	89	66	65	46	45	60
No	75	11	34	35	54	55	40
Total	100	100	100	100	100	100	100

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TABLE 36: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO WOULD CONSIDER REPLANTING SOME OF THEIR CUTOVER OR SCRUB LAND BY FOREST REGION (QUESTION 20)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Replant	50	54	40	45	37	54	43
No	13	35	34	45	41	33	38
Not Applicable	38	11	27	10	22	14	19
Total	100	100	100	100	100	100	100

TABLE 37: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS THAT WOULD CONSIDER REPLANTING SOME OF THEIR CUTOVER OR SCRUB LAND BY FOREST REGION (QUESTION 20)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Replant	31	53	49	50	58	56	55
No	13	29	31	44	32	23	32
Not Applicable	56	18	20	6	10	21	13
Total	100	100	100	100	100	100	100

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TABLE 38: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS WHO WOULD CLEAR SOME FOREST LAND FOR OTHER PURPOSES BY FOREST REGION (QUESTION 21)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Clear Land	52	35	30	57	44	50	44
No	48	65	70	43	56	50	56
Total	100	100	100	100	100	100	100

TABLE 39: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS THAT WOULD CLEAR SOME FOREST LAND FOR OTHER PURPOSES BY FOREST REGION (QUESTION 21)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Clear Land	32	35	34	54	53	70	48
No	68	65	66	46	47	30	52
Total	100	100	100	100	100	100	100

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TABLE 40: ESTIMATED PERCENTAGE OF FOREST LANDS THAT WOULD BE CONSIDERED FOR REPLANTING BY FOREST REGION BY AMOUNT OF FOREST LAND TO BE REPLANTED IN HECTARES (QUESTION 20)

(FOREST LAND REPLANTED : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0	59	53	64	68	73	54	65
1 - 4	8	1	2	5	4	0	4
5 - 9	5	0	3	1	0	17	2
10 - 19	13	18	6	9	1	9	7
20 - 29	4	0	5	7	1	3	3
30 - 49	6	13	13	0	2	17	6
50 - 99	4	5	7	10	9	0	7
100 +	0	10	0	0	9	0	5
Total	100	100	100	100	100	100	100

TABLE 41: ESTIMATED PERCENTAGE OF FOREST LANDS THAT WOULD BE CONSIDERED FOR CLEARING BY FOREST REGION BY AMOUNT OF FOREST LAND TO BE CLEARED IN HECTARES (QUESTION 21)

(FOREST LAND CLEARED : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Hectares							
0	54	72	74	46	62	57	61
1 - 4	16	5	9	9	2	4	6
5 - 9	2	7	2	4	7	4	5
10 - 19	23	5	2	13	1	7	6
20 - 29	4	1	2	12	1	9	4
30 - 49	1	1	3	12	4	11	5
50 - 99	0	2	7	1	10	9	6
100 +	0	8	2	4	12	0	7
Total	100	100	100	100	100	100	100

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TABLE 42: ESTIMATED PERCENTAGE OF FOREST LANDS THAT WOULD BE CONSIDERED FOR REPLANTING BY FOREST REGION BY AMOUNT OF FOREST LAND TO BE REPLANTED IN HECTARES (QUESTION 20)

(FOREST LAND REPLANTED : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	59	53	64	68	73	54	65
1 - 24	17	18	14	19	9	20	14
25 - 49	6	19	7	8	8	22	11
50 - 74	11	10	9	5	3	4	6
75 - 99	3	0	4	0	2	0	2
100 +	3	0	2	0	4	0	2
Total	100	100	100	100	100	100	100

TABLE 43: ESTIMATED PERCENTAGE OF FOREST LANDS THAT WOULD BE CONSIDERED FOR CLEARING BY FOREST REGION BY AMOUNT OF FOREST LAND TO BE CLEARED IN HECTARES (QUESTION 21)

(FOREST LAND CLEARED : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	54	72	72	46	62	57	61
1 - 24	27	14	18	38	10	25	18
25 - 49	5	9	5	8	18	10	12
50 - 74	11	1	5	4	7	7	6
75 - 99	3	5	0	0	3	0	2
100 +	0	0	0	5	0	2	1
Total	100	100	100	100	100	100	100

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TABLE 44: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY MOST IMPORTANT BENEFIT EXPECTED FROM FOREST LAND IN NEXT 10 YEARS BY FOREST REGION (QUESTION 22)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Land Value	16	22	18	4	11	10	13
Income Timber Sales	14	16	19	16	12	15	15
Farm, Ranch, Home	14	38	20	55	33	24	34
Recreation	6	3	4	2	1	5	2
Aesthetic	30	7	29	18	34	29	26
Other	0	2	2	0	1	3	1
Multiple Selection	20	12	9	5	8	14	9
Total	100	100	100	100	100	100	100

TABLE 45: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY MOST IMPORTANT BENEFIT EXPECTED FROM FOREST LAND IN NEXT 10 YEARS BY FOREST REGION (QUESTION 22)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Land Value	12	19	10	2	13	8	12
Income Timber Sales	43	14	18	20	12	28	15
Farm, Ranch, Home	7	52	21	66	32	34	40
Recreation	3	2	2	0	0	3	1
Aesthetic	18	1	15	11	12	19	10
Other	0	0	0	0	1	1	1
Multiple Selection	17	12	34	1	30	7	21
Total	100	100	100	100	100	100	100

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TABLE 46: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY AGE GROUP BY FOREST REGION (QUESTION 23)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Age Groups							
Under 20	0	0	0	0	0	0	0
20 - 29	0	0	0	3	3	2	2
30 - 39	3	16	15	16	7	10	11
40 - 49	28	4	13	14	25	38	20
50 - 59	28	35	19	31	34	15	30
60 - 69	24	22	38	27	23	25	25
70 - 79	18	21	13	9	9	6	12
80 +	0	2	2	0	0	5	1
Total	100	100	100	100	100	100	100
Average Age by Region	58	58	57	53	54	53	55

TABLE 47: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY AGE GROUP BY FOREST REGION (QUESTION 23)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Age Groups							
Under 20	0	0	0	0	0	0	0
20 - 29	0	0	0	3	1	3	1
30 - 39	2	15	26	10	5	5	9
40 - 49	17	1	8	13	41	36	25
50 - 59	48	56	22	37	29	15	37
60 - 69	18	7	27	30	17	24	17
70 - 79	15	21	16	7	7	12	11
80 +	0	0	1	0	0	5	0
Total	100	100	100	100	100	100	100

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TABLE 48: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY GENDER BY FOREST REGION (QUESTION 24)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Male	80	97	80	83	91	94	89
Female	20	3	20	17	9	6	11
Total	100	100	100	100	100	100	100

TABLE 49: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY GENDER BY FOREST REGION (QUESTION 24)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Male	85	100	75	85	93	96	92
Female	15	0	25	15	7	4	8
Total	100	100	100	100	100	100	100

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TABLE 50: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY OCCUPATION BY FOREST REGION (QUESTION 25)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Farmer, Rancher	11	61	23	57	57	21	49
Fisherman	0	0	0	0	0	0	0
Woodsworker	4	2	13	1	5	8	5
Wage Earner	4	2	0	11	1	9	4
Office Worker	3	0	2	0	0	2	0
Manager / Director	14	7	5	4	5	3	6
Trades Worker	4	1	7	5	9	7	6
Business/Commercial	9	4	5	2	1	11	3
Professional	22	5	5	11	5	21	8
Homemaker	1	2	4	2	0	0	1
Retired	26	16	33	6	15	19	16
Other	3	0	3	0	3	0	2
Total	100	100	100	100	100	100	100

TABLE 51: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY OCCUPATION BY FOREST REGION (QUESTION 25)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Farmer, Rancher	9	85	28	82	71	23	70
Fisherman	0	0	0	0	0	0	0
Woodsworker	6	1	13	0	2	8	2
Wage Earner	1	0	0	4	0	6	1
Office Worker	1	0	1	0	0	0	0
Manager / Director	38	1	11	3	8	17	7
Trades Worker	3	0	2	2	6	2	3
Business/Commercial	5	1	17	1	0	7	2
Professional	13	3	7	6	3	14	4
Homemaker	0	0	1	1	0	0	0
Retired	21	8	19	2	7	22	8
Other	4	0	1	0	4	0	2
Total	100	100	100	100	100	100	100

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TABLE 52: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY EDUCATION BY FOREST REGION (QUESTION 26)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Grade 7 or Less	1	16	9	10	10	13	11
Some High School	9	27	28	12	28	8	22
High School	18	12	11	22	21	17	18
Some College, Univ.	14	9	20	18	10	19	13
Trade Certificate	4	10	2	17	11	12	10
Tech/Vocat/College	9	10	11	1	3	5	5
University	40	15	18	19	14	25	18
Multiple Degrees	6	0	2	1	3	2	2
Total	100	100	100	100	100	100	100

TABLE 53: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY EDUCATION BY FOREST REGION (QUESTION 26)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Grade 7 or Less	1	15	10	8	6	20	9
Some High School	5	11	24	8	23	12	17
High School	11	7	14	33	17	23	17
Some College, Univ.	8	4	20	11	6	10	7
Trade Certificate	1	23	1	17	6	6	11
Tech/Vocat/College	10	12	13	0	1	6	4
University	59	28	18	22	18	22	22
Multiple Degrees	5	0	1	0	24	2	12
Total	100	100	100	100	100	100	100

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TABLE 54: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY FORESTRY INSTRUCTION BY FOREST REGION (QUESTION 27)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Youth Training	0	5	5	13	0	8	4
Vocational	0	0	2	1	6	3	3
Technical	0	0	4	1	0	2	1
University	8	4	2	0	0	0	1
Experience	29	33	34	35	45	38	39
Other	8	4	9	4	2	3	4
Multiple	6	5	2	1	0	2	2
None	49	49	42	46	47	44	46
Total	100	100	100	100	100	100	100

TABLE 55: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY FORESTRY INSTRUCTION BY FOREST REGION (QUESTION 27)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Youth Training	0	4	3	13	0	6	3
Vocational	0	0	5	0	2	5	2
Technical	0	0	1	0	0	3	0
University	7	1	4	0	0	0	1
Experience	51	27	33	23	45	47	37
Other	4	9	7	4	1	3	4
Multiple	4	9	1	1	0	13	3
None	35	51	46	59	52	24	51
Total	100	100	100	100	100	100	100

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TABLE 56: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY PERCENT OF INCOME DERIVED FROM FOREST LANDS BY FOREST REGION (QUESTION 28)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	85	55	66	81	79	67	74
1 - 10	13	38	21	12	17	24	20
11 - 25	1	0	10	3	3	5	3
26 - 50	0	6	2	0	1	0	2
51 - 75	1	0	2	3	0	4	1
76 - 100	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100

TABLE 57: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY PERCENT OF INCOME DERIVED FROM FOREST LANDS BY FOREST REGION (QUESTION 28)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Percentage							
0	93	51	45	75	44	49	52
1 - 10	5	39	39	20	52	41	42
11 - 25	0	0	12	3	2	6	2
26 - 50	0	10	0	0	2	0	3
51 - 75	2	0	4	2	0	4	1
76 - 100	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100

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TABLE 58: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY GROSS ANNUAL INCOME BY FOREST REGION (QUESTION 29)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
< $10,000	3	5	12	9	9	11	9
$10 - 24,999	19	23	37	19	18	13	20
$25 - 39,999	18	9	15	9	16	21	14
$40 - 54,999	23	18	16	19	13	22	16
$55,000 +	37	46	21	44	43	34	41
Total	100	100	100	100	100	100	100

TABLE 59: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY GROSS ANNUAL INCOME BY FOREST REGION (QUESTION 29)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
< $10,000	1	1	3	12	5	10	5
$10 - 24,999	9	14	16	13	15	6	14
$25 - 39,999	15	1	9	3	7	26	6
$40 - 54,999	47	10	25	6	6	17	10
$55,000 +	28	73	47	67	66	41	65
Total	100	100	100	100	100	100	100

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TABLE 60: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY KNOWLEDGE OF PROVINCIAL WOODLOT LICENCE AND FEDERAL PRIVATE FOREST LAND GOVERNMENT PROGRAMS BY FOREST REGION (QUESTION 30)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Both Programs	11	5	13	8	4	13	7
Yes, Woodlot	10	27	18	37	10	22	19
Yes, Private Lands	4	0	2	0	3	0	2
Don't Know Either	66	59	56	50	69	63	62
Not Certain	9	10	12	4	15	2	11
Total	100	100	100	100	100	100	100

TABLE 61: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY KNOWLEDGE OF PROVINCIAL WOODLOT LICENCE AND FEDERAL PRIVATE FOREST LAND GOVERNMENT PROGRAMS BY FOREST REGION (QUESTION 30)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
Yes, Both Programs	8	6	30	6	2	19	6
Yes, Woodlot	6	40	14	44	4	25	20
Yes, Private Lands	3	0	2	0	2	0	1
Don't Know Either	80	53	39	49	60	54	55
Not Certain	4	2	15	1	33	2	18
Total	100	100	100	100	100	100	100

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TABLE 62: ESTIMATED PERCENTAGE OF FOREST LAND OWNERS BY HOW BEST TO RECEIVE INFORMATION BY FOREST REGION (QUESTION 31)

(FOREST LAND OWNERS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
TV Advertising	6	0	3	0	2	0	2
Newsletters	25	24	36	20	23	25	24
Radio	0	1	2	0	0	0	0
Local & B.C. Papers	6	0	12	5	5	5	5
Local Area Meetings	10	20	12	11	6	5	10
Direct Mail	49	63	55	53	36	59	48

Note: The percentages do not add to 100, since a forest land owner may select more than one option.

TABLE 63: ESTIMATED PERCENTAGE OF FOREST LAND HOLDINGS BY HOW BEST TO RECEIVE INFORMATION BY FOREST REGION (QUESTION 31)

(FOREST LAND HOLDINGS : IN PERCENT)

	Vancouver	Kamloops	Nelson	Cariboo	Prince George	Prince Rupert	Total B.C.
TV Advertising	5	0	8	0	1	0	1
Newsletters	19	12	52	9	16	22	17
Radio	0	0	0	0	0	0	0
Local & B.C. Papers	4	0	12	9	3	6	4
Local Area Meetings	6	15	12	15	4	5	8
Direct Mail	30	48	73	39	22	49	35

Note: The percentages do not add to 100, since a forest land owner may select more than one option.